Refine Search

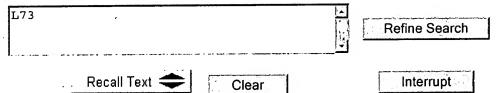
Search Results -

Term	Documents
CATIONS	131673
CATION	356514
MAGNESIUM	589447
MAGNESIUMS	264
MAGNESIA	49459
MAGNESIAS	486
(72 AND (CATIONS ADJ MAGNESIUM)).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	0
(L72 AND CATIONS ADJ MAGNESIUM).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	0

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Search History

DATE: Monday, October 15, 2007 Purge Queries Printable Copy Create Case

Set Name Query side by side	<u>Hit</u> Count	Set Name result set
DB=PGPB, USPT, USOC, EPAB, JPAB, DWPI; THES=ASSIGNEE; PLUR=YES; O	P=AND	
L73 L72 and cations adj magnesium	0	<u>L73</u>
<u>L72</u> L71 and pneumoniae	126	<u>L72</u>
L71 L70 and oxidiz\$	581	L71

WEST Refine Search Page 2 of 3

L69 and cations	1090	<u>L70</u>
L67 and polysaccharide	1090	<u>L69</u>
L67 oxidiz\$ near cations	0	<u>L68</u>
L66 and cations	2055	<u>L67</u>
multivalent and conjugate	5634	<u>L66</u>
5316926.pn.	2	<u>L65</u>
4242501.pn.	3	<u>L64</u>
4695624.pn.	2	<u>L63</u>
6472506.pn.	2	<u>L62</u>
L60 and (oxidation or oxidizing or oxidiz\$)	33	<u>L61</u>
L59 and water adj cations	92	<u>L60</u>
(polysaccharide or saccharide or carbohydrate)	247794	<u>L59</u>
polysaccharide and oxidation and magnesium adj cations	23	<u>L58</u>
L56 and (saccharide or carbohydrate)	194	<u>L57</u>
L55 and (calcium or magnesium)	237	<u>L56</u>
L51 and cations and periodic adj acid	296	<u>L55</u>
L53 and magnesium adj cations	31	<u>L54</u>
L51 and polysaccharide	13694	<u>L53</u>
L51 and polysaccahide	0	<u>L52</u>
L50 and (cation or cations or bivalent adj cations or divalent adj cation or valent adj cations or valent near cation or magnesium adj cations)	22190	<u>L51</u>
L49 and (polysaccharide or saccharide or carbohydrate)	66833	<u>L50</u>
oxidation or oxidizing or oxidiz\$	1009449	<u>L49</u>
L47 and conjugate	29	<u>L48</u>
L45 and (polysaccharide or saccharide or oligosaccharide)	146	<u>L47</u>
L45 and polysaccharide	99	<u>L46</u>
L44 and magnesium near cation	894	<u>L45</u>
L31 and oxidation or oxidizing or oxidiz\$	620763	<u>L44</u>
L31 and oxidation or oxidizing or oxidiz\$ L42 and saccharide	620763	<u>L44</u> <u>L43</u>
L42 and saccharide	0	<u>L43</u>
L42 and saccharide L41 and conjugate	0 25	<u>L43</u> <u>L42</u>
L42 and saccharide L41 and conjugate L36 and valent adj cations	0 25 25	<u>L43</u> <u>L42</u> <u>L41</u>
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation	0 25 25 0	L43 L42 L41 L40
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations	0 25 25 0 0	L43 L42 L41 L40 L39
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations L36 and cations	0 25 25 0 0 114	L43 L42 L41 L40 L39 L38
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations L36 and cations L36 and magnesium	0 25 25 0 0 114 85	L43 L42 L41 L40 L39 L38 L37
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations L36 and cations L36 and serotype	0 25 25 0 0 114 85	L43 L42 L41 L40 L39 L38 L37 L36
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations L36 and cations L36 and serotype L34 and carrier adj protein	0 25 25 0 0 114 85 114 1643 7150 13319	L43 L42 L41 L40 L39 L38 L37 L36 L35
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations L36 and cations L36 and serotype L34 and carrier adj protein L33 and conjugate	0 25 25 0 0 114 85 114 1643 7150 13319 61807	L43 L42 L41 L40 L39 L38 L37 L36 L35 L34 L33 L32
L42 and saccharide L41 and conjugate L36 and valent adj cations L36 and magnesium adj cation L36 and magnesium adj cations L36 and cations L36 and cations L36 and serotype L34 and carrier adj protein L33 and conjugate L32 and (saccharide or carbohydrate)	0 25 25 0 0 114 85 114 1643 7150 13319	L43 L42 L41 L40 L39 L38 L37 L36 L35 L34 L33
	L67 oxidiz\$ near cations L66 and cations multivalent and conjugate 5316926.pn. 4242501.pn. 4695624.pn. 6472506.pn. L60 and (oxidation or oxidizing or oxidiz\$) L59 and water adj cations (polysaccharide or saccharide or carbohydrate) polysaccharide and oxidation and magnesium adj cations L56 and (saccharide or carbohydrate) L55 and (calcium or magnesium) L51 and cations and periodic adj acid L53 and magnesium adj cations L51 and polysaccharide L51 and polysaccharide L50 and (cation or cations or bivalent adj cations or divalent adj cation or valent adj cations or valent near cation or magnesium adj cations) L49 and (polysaccharide or saccharide or carbohydrate) oxidation or oxidizing or oxidiz\$ L47 and conjugate L45 and (polysaccharide or saccharide or oligosaccharide) L45 and polysaccharide	L67 oxidiz\$ near cations 0 L66 and cations 2055 multivalent and conjugate 5634 5316926.pn. 2 4242501.pn. 3 4695624.pn. 2 6472506.pn. 2 L60 and (oxidation or oxidizing or oxidiz\$) 33 L59 and water adj cations 92 (polysaccharide or saccharide or carbohydrate) 247794 polysaccharide and oxidation and magnesium adj cations 23 L56 and (saccharide or carbohydrate) 194 L55 and (calcium or magnesium) 237 L51 and cations and periodic adj acid 296 L53 and magnesium adj cations 31 L51 and polysaccharide 13694 L51 and polysaccharide 0 L50 and (cation or cations or bivalent adj cations or divalent adj cation or valent adj cations or valent near cation or magnesium adj cations 22190 L49 and (polysaccharide or saccharide or carbohydrate) 66833 oxidation or oxidizing or oxidiz\$ 1009449 L47 and conjugate 29 L45 and polysaccharide or saccharide or oligosaccharide) 146 L45 and polysaccharide 60 saccharide or oligosaccharide)

WEST Refine Search Page 3 of 3

<u>L29</u>	L28 and magnesium	3729	<u>L29</u>
<u>L28</u>	L27 and saccharide	7326	<u>L28</u>
<u>L27</u>	conjugate	150812	<u>L27</u>
<u>L26</u>	L25 and oxidiz\$ and reduc\$	62	<u>L26</u>
<u>L25</u>	L17 and (cations or magnesium or cation adj Mg or Mg)	193	<u>L25</u>
<u>L24</u>	L23 and oxidiz\$ and reduc\$	42	<u>L24</u>
<u>L23</u>	L17 and (cations or magnesium)	117	<u>L23</u>
<u>L22</u>	L16 and oxidizing and reducing	67	<u>L22</u>
<u>L21</u>	L20 and periodic adj acid	3	<u>L21</u>
<u>L20</u>	L17 and acetic adj acid	81	<u>L20</u>
<u>L19</u>	L18 acetic adj acid	9	<u>L19</u>
<u>L18</u>	L17 and oxidizing adj agent	15	<u>L18</u>
<u>L17</u>	L16 and carrier adj protein	206	<u>L17</u>
<u>L16</u>	L15 and serotype	473	<u>L16</u>
<u>L15</u>	L14 and saccharide	7326	<u>L15</u>
<u>L14</u>	conjugate	150812	<u>L14</u>
<u>L13</u>	7053204.pn.	2	<u>L13</u>
<u>L12</u>	keller-n.in.	18	<u>L12</u>
<u>L11</u>	keller-nancy.in.	2	<u>L11</u>
<u>L10</u>	L9 and (trichostatin or apicidin or SAHA or M344 or n-butyrate)	31	<u>L10</u>
<u>L9</u>	L6 and inhibitor	408	<u>L9</u>
<u>L8</u>	L6 and histone	8	<u>L8</u>
<u>L7</u>	L6 and hdaA	0	<u>L7</u>
<u>L6</u>	keller.in.	18145	<u>L6</u>
<u>L5</u>	finco-o.in.	1	<u>L5</u>
<u>L4</u>	bonci-a.in.	7	<u>L4</u>
<u>L3</u>	ratti-g.in.	31	<u>L3</u>
<u>L2</u>	guido-g.in.	5	<u>L2</u>
<u>L1</u>	grandi-g.in.	76	<u>L1</u>

END OF SEARCH HISTORY

The Contents of Case 10566898

•	0	DD M	TDL	0	DI1
Qnum	Query	DB Name USPT	Thesaurus ASSIGNEE	Operator AND	Plural YES
Q1	hydrazine	USPT	ASSIGNEE	AND	YES
Q2	5371197.pn. 5849301	USPT	ASSIGNEE	AND	YES
Q3		USPT	ASSIGNEE	AND	YES
Q4	5849301.pn.	USPT	ASSIGNEE	AND	YES
Q5	6645503.pn.	USPT	ASSIGNEE	AND	YES
Q6	5965714.pn.	PGPB,USPT,USOC,EPAB,JPAB,DWPI	•	AND	YES
Q7	5623057.pn. 20030180316	PGPB PGPB	ASSIGNEE	AND	YES
Q8		PGPB	ASSIGNEE	AND	YES
Q9	20060228380		ASSIGNEE	AND	1 E3
010	N2H4 or hydrazine		ACCIONEE	AND	VEC
Q10	or diamide or anhydrous	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
	N2H4 or hydrazine				
Q11	or diamide or	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
	anhydrous adj	, , , , , , , ,			
	hydrazine				
	N2H4 or hydrazine	;			
	or diamide or				
Q12	anhydrous adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
	hydrazine or hydrazine adj				
•	dichloride				
	Q12 and (protein				
Q13	or carrier protein)	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
Q14		ePGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
Q15	•	PGPB,USPT,USOC,EPAB,JPAB,DWPI		AND	YES
Q16	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	PGPB,USPT,USOC,EPAB,JPAB,DWPI		AND	YES
Q17	-	PGPB,USPT,USOC,EPAB,JPAB,DWPI		AND	YES
Q18	O17@ay>2003	PGPB,USPT,USOC,EPAB,JPAB,DWPI		AND	YES
				•	
Q19		PGPB,USPT,USOC,EPAB,JPAB,DWPI		AND	YES
Q20	acia	PGPB,USPT,USOC,EPAB,JPAB,DWPI		AND	YES
Q21	Q15 and hydrazine adj dichloride	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
	Q15 and protein		. caravier		* / 17.0
Q22	adj hydraz\$	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
Q23	6800728.pn.	USPT	ASSIGNEE	AND	YES
(Q15 and protein				
Q24	adj hydraz\$ adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
	dihydrochloride				
Q25	Q15 and	PGPB,USPT,USOC,EPAB,JPAB,DWPI	ASSIGNEE	AND	YES
Q23	dihydrochloride	1012,0011,0000,01110,01110,0111	.100101100	7 1. 12	. 20

Q26 Q27	Q25 and hydrazine 4695624.pn.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE USPT ASSIGNEE	AND AND	YES YES
Q28	esser-mark.in.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q29	esser-m.in.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q30	Q29 and hydrazine	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q31	Q29 and dihydrochloride	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q32	SCHLOTTMANN s.in.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q33	Q32 and hydrazine	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q34	Q32 and dihydrochloride	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q35	hausdorff-w.in.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q36	hausdorff.in.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q37	Q36 and dichlorid	ePGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q38	Q36 and dihydrochloride	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND.	YES
Q39	hausdorff.in. and periodate	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q40	Q39 and adipic ad	^j PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q41	Q39 and adipic	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q42	siber.in. Q42 and	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q43	(dihydrochloride o dichloride)	rPGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q44	siber.in. and periodate	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q45	Q44 and adipic	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q46	paradiso.in.	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q47	Q46 and adipic	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q48	periodate	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	Q48 and adipic ad	j		
Q49	acid adj dihydrahize	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	Q48 and adipic ad	j		
Q50	acid adj dihydrazide	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q51		e PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q52		ePGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q53	Q52@py>2003	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q54	Q52 not Q53	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q55	Q54 and hydrazing	e PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
056	Q54 and (N2H4 o hydrazine or diamide or		AND	YES
Q56	anhydrous adj hydrazine or hydrazine adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	I ES

	dichloride or dihydrochloride)			
Q57		PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q58	Q50 and filtra\$	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
(Q58 and sodium	- , , , , ,		
Q59	adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	cyanoborohydride			
060	Q59 and sodium	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q60	adj carbonate			
Q61	Q60 and freeze	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	Q50 and sodium			
Q62	adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	cyanoborohydride			
Q63	Q62 and sodium	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
(adj carbonate			
	Q62 and add\$ adj			
064	(saccharose or	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q64	or sugar or	Trurb, OST 1, OSOC, EI Ab, JI Ab, DWI I ASSIGNEE	AND	1 25
	glucose)			
	Q62 and			
	(saccharose or			
Q65		PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	or sugar or	, , , , , ,		
	glucose)			
066	Q62 and freeze ad	j PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
Q66	dry	1 of B, ost 1, osoe, El Ab, st Nb, b wit Nooisivee	711112	1 20
	Q48 and sodium			
Q67	adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
	cyanoborohydride			
	Q67 and adipic ad		AND	VEC
Q68	acid adj	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	YES
0.60	dihydrazide	DODD HODT HOOG EDAD IDAD DWDI ACCIONEE	AND	YES
Q69	Q68 and freeze	PGPB,USPT,USOC,EPAB,JPAB,DWPI ASSIGNEE	AND	1 E3

Case Operation	Run Case	_	Submit	Cancel

divalent cations were neither stimulatory nor required for activity. The Km values for arabinose 5-P and.....27 mol m-3 and about 35 mmol m-3, respectively. The kinetics of periodate oxidation of KDOP formed by spinach KDOP synthase indicate that the same stereochemical configuration exists as... Identifiers-- ...RHAMNOGALACTURONAN-II; CELL WALLS; POLYSACCHARIDE; ACID; ACINETOBACTER; BIOSYNTHESIS; COMPONENT

USPTO Full Text Retrieval Options Fulltext available through: CAB Abstracts (c) 2007 CAB International. All rights reserved. 0009157924 CAB Accession Number: 20073007173 Establishment of SSR and RAPD technique system in Castanea mollissima . Wang TongKun; Dong ChaoHua; Ma Yan; Qi YongShun; Zhang JingZheng; Bai SuHua Author email address: wtkqhd@eyou.com Department of Horticulture & Landscape Changli, Hebei 066004, China. Journal of Fruit Science vol. 23 (6): p.825-829 Publication Year: 2006 ISSN: 1009-9980 Publisher: Magzines Publishing House Zhengzhou , China Language: Chinese Summary Language: English Record Type: Abstract
Document Type: Journal article
...developed. PVP and 2-mercaptoethanol were added to lyses buffer in order to
inhibit the oxidation of polyphenol. High concentration of salt solution and elution
for many times were used to remove the polysaccharide. High quality DNA with
molecular mass above 23 kb, D SUB 260nm /D SUB 280nm...

Descriptors: ...magnesium;

32/3, K/25 (Item 1 from file: 50) Links

32/3,K/26 (Item 2 from file: 50) Links Fulltext available through: USPTO Full Text Retrieval Options CAB Abstracts (c) 2007 CAB International. All rights reserved. CAB Accession Number: 19941903184 0006833589 Dispersion and aggregation of soils as influenced by organic and inorganic polymers.

Gu, B.; Doner, H. E. Department of Soil Science, Univ. California, Berkeley, CA 94720, USA. Soil Science Society of America Journal vol. 57 (3): p.709-716 Publication Year: 1993 ISSN: 0361-5995 Language: English Record Typ Document Type: Journal article Record Type: Abstract The influence of three organic polyanions (a soil humic acid, a soil polysaccharide, and a commercial anionic polysaccharide) and hydroxy-Al polycations (Al-p) on soil clay dispersion, aggregation, and hydraulic conductivity were... ... of NaClO SUB 4. The organic polyanions, especially humic acid, induced dispersion rather than flocculation. Oxidation of soil organic matter with H SUB 2 O SUB 2 and addition of Al... ... clay colloids and, in addition, acted as bridges between negatively charged colloids and the anionic polysaccharide preventing soil clay dispersion. Excessive additions of Al-p restabilized suspensions. Hydraulic conductivities of soil columns treated with Al-p or its combinations with anionic polysaccharide or humic acid were two orders of magnitude higher than those without Al-p throughout a 5-d leaching period. Although treatment of the Na-soils with the anionic polysaccharide and leaching period. polysaccharide increased soil aggregate stability as measured by the wet-sieving method, it did not result... ... organic components in addition to: pH, ionic strength, and composition. In the absence of polyvalent cations, negatively charged humic substances do not contribute to stable soil aggregation. Both polyvalent cations and polyanions may be additive in preventing soil clay dispersion. Page 80

```
32/3,K/27 (Item 1 from file: 73) Links
Fulltext available through: USPTO Full Text Retrieval Options
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               EMBASE No: 2005330079
13278676
Aspergillus fumigatus: Saprophyte or pathogen?
Tekaia F.; Latge J.-P.
J.-P. Latge, Unite des Aspergillus, Institut Pasteur, 25, rue du Dr Roux, 75015
         France
Author Email: jplatge@pasteur.fr
Current Opinion in Microbiology ( CURR. OPIN. MICROBIOL. ) ( United Kingdom )
                                                                                             2005
, 8/4 (385-392)
CODEN: COMIF
                 ISSN: 1369-5274
Publisher Item Identifier: S1369527405000925
Document Type: Journal; Review
Language: ENGLISH
                      Summary Language: ENGLISH
Number Of References: 51
DRUG DESCRIPTORS:
proteome--endogenous compound--ec; oxidizing agent; polysaccharide--endogenous compound--ec; protein histidine kinase --endogenous compound--ec; cyclic
AMP--endogenous compound--ec; guanine nucleotide binding protein alpha subunit--endogenous compound--ec; transferrin; iron; magnesium; phosphate; zinc;
antifungal agent
CAS Registry Number: ...7439-89-6 (iron); 7439-95-4 (magnesium); 14066-19-4...
 32/3,K/28 (Item 2 from file: 73) Links
    Fulltext available through: American Society for Microbiology
                                                                                custom link
USPTO Full Text Retrieval Options
EMBASE
(c) 2007 Elsevier B.V. All rights reserved. 13226803 EMBASE No: 2005285963
Calcium-induced virulence factors associated with the extracellular matrix of mucoid
Pseudomonas aeruginosa biofilms
Sarkisova S.; Patrauchan M.A.; Berglund D.; Nivens D.E.; Franklin M.J.
M.J. Franklin, Department of Microbiology, 109 Lewis Hall, Montana State University.
Bozeman, MT 59717
                       United States
Journal of Bacteriology ( J. BACTERIOL. ) ( United States ) 2005, 187/13
(4327 - 4337)
CODEN: JOBAA
                 ISSN: 0021-9193
Document Type: Journal; Article
Language: ENGLISH Summary Language: ENGLISH
Number Of References: 76
...to biofilm-assodated infections. The pulmonary fluid of CF patients usually
contains elevated concentrations of cations and may contain the P. aeruginosa
redox-active pigment pyocyanin, which is known to disrupt calcium homeostasis of
host cells. Since divalent cations are important bridging ions for bacterial
polysaccharides and since they may play regulatory roles in...
DRUG DESCRIPTORS:
pyocyanine; divalent cation; bacterial polysaccharide--endogenous compound--ec; alginic acid; calmodulin; phenazine; proteinase
MEDICAL DESCRIPTORS:
bacterial colonization; lung parenchyma; cystic fibrosis; oxidation reduction
reaction; lung fluid; homeostasis; bacterial gene; gene expression; confocal laser
microscopy; genetic transcription; infrared...
```

Page 81

32/3,K/29 (Item 3 from file: 73) Links

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Proceedings of the National Academy of Sciences
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(PNAS)
EMBASE
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                EMBASE No: 2005055606
12995970
Nanoscale environments associated with bioweathering of a Mg-Fe-pyroxene
Benzerara K.; Yoon T.H.; Menguy N.; Tyliszczak T.; Brown Jr. G.E.
K. Benzerara, Surf. and Aqueous Geochemistry Group, Dept. of Geol. and Environ. Sciences, Stanford University, Stanford, CA 94305-2115 United States
Author Email: benzerar@stanford.edu
Proceedings of the National Academy of Sciences of the United States of America (PROC. NATL. ACAD. SCI. U. S. A.) (United States) 25 JAN 2005, 102/4 (979-982) CODEN: PNASA ISSN: 0027-8424 Document Type: Journal; Article
Language: ENGLISH Summ
Number Of References: 37
                        Summary Language: ENGLISH
...associated with polysaccharides adjacent to the microorganism, and regions
surrounding the microorganism with different iron oxidation states. Our results
confirm the presence of different microenvironments at this microorganism-mineral
interface and...
DRUG DESCRIPTORS:
*_magnesium;_*iron; *silicate
aluminum; calcium carbonate; polysaccharide; calcium
MEDICAL DESCRIPTORS:
thermodynamics; scanning transmission electron microscopy; transmission electron
microscopy; oxidation; fossil; oxidation reduction reaction; pH; article; priority
iournal
CAS Registry Number: 7439-95-4 (magnesium); 14093-02-8...
 32/3,K/30 (Item 4 from file: 73) Links
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               EMBASE No: 2003233914
12122987
Emerging themes in manganese transport, biochemistry and pathogenesis in bacteria
Kehres D.G.; Maguire M.E.
D.G. Kehres, Department of Pharmacology, School of Medicine, Case Western Reserve
University, 10900 Euclid Avenue, Cleveland, OH 44106-4965
Author Email: dgk2@po.cwru.edu
                                                                            United States
FEMS Microbiology Reviews (FEMS MICROBIOL. REV. ) (Netherlands) (263-290)
                                                                                        2003 , 27/2-3
CODEN: FMREE
                   ISSN: 0168-6445
Document Type: Journal; Review
Language: ENGLISH
                       Summary Language: ENGLISH
Number of References: 275
...ATPase superfamily. Each is highly selective for MnSUP2+ over FeSUP2+ or other
transition metal divalent cations, and each can accumulate millimolar amounts of
intracellular MnSUP2+ even when environmental MnSUP2+ is scarce...
DRUG DESCRIPTORS:
enzyme; glyceric acid; pyruvic acid; oxaloacetic acid; cation; hydrogen peroxide; magnesium; free radical; catalase; peroxidase; reactive nitrogen species; transcription factor; regulator protein; phosphatase; adenylate cyclase;
phosphoprotein phosphatase; protein kinase; polyamine; bacterial DNA; bacterial RNA; phospholipid; polysaccharide; phosphoglycerate mutase; fructose bisphosphatase; fructose; phosphotransferase; unclassified drug
MEDICAL DESCRIPTORS:
...genome analysis; chemical analysis; regulatory mechanism; gene control; genetic transcription; gene expression; bacterial growth; phagosome; oxidation reduction
                                                 Page 82
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search.txt
state; detoxification; metabolism; binding affinity; protein binding; RNA structure:
structure analysis; RNA stability; RNA...
CAS Registry Number: ...328-42-7 (oxaloacetic acid); 7722-84-1 (hydrogen peroxide); 7439-95-4 (magnesium); 9001-05-2 (catalase); 9003-99-0 (peroxidase); 9013-05-2
(phosphatase); 9012-42-4...
 32/3,K/31 (Item 1 from file: 103) Links
Energy SciTec
(c) 2007 Contains copyrighted material. All rights reserved.
               NOV-91-007058; EDB-91-070113
03132678
Title: Novel breaker/filtration process reduces the cost of recycling viscosified
brine completion fluids
Author(s): McIntyre, J.A.; Kalnins, J.M.; Varjian, R.D. (Dow Chemical Co., Midland,
MI (USA)); Powell, J. (MI Drilling Fluids, AL (US))
Source: SPE (Society of Petroleum Engineers) Production Engineering (USA) v 5:4.
Coden: SPENE ISSN: 0885-9221
                                          p 469-494
Publication Date: Nov 1990
Language: In English
Abstract: This paper reports on the development of a process for recycling polysaccharide-viscosified brine completion fluids. The process used oxidants generated directly in the used brine by... ...sup {minus}} brines containing Na{sup +}, K{sup +}, Ca{sup +2}, and Zn{sup +2} cations. Calculations with information from pilot-scale tests on NaRy/NaCl brines indicate that the process...
Descriptors: ...OXIDIZERS;
 32/3,K/32 (Item 2 from file: 103) Links
Energy SciTec
(c) 2007 Contains copyrighted material. All rights reserved. 01355636 EDB-84-053316
Title: Viscosity stability of aqueous polysaccharide solutions Author(s): Glass, J.E.; Ahmed, M.; Soules, D.A.
Affiliation: North Dakota State University
Conference Title: SPE California regional meeting
Conference Location: Ventura, CA, USA
                                                       Conference Date: 23 Mar 1983
Source: Soc. Pet. Eng. AIME, Pap. (United States) v SPE11691 . Coden: SEAPA
                                          p 245-256
Publication Date: Mar 1983
Report Number(s): CONF-830312-
Language: English
Title: Viscosity stability of aqueous polysaccharide solutions
Abstract: The viscosity stability of carbohydrate polymers under thermal-oxidative, mechanical and acid-catalyzed hydrolysis is examined and compared with the.....as
an antagonist to polymer stability is investigated in the presence of two
stabilizing additives, magnesium oxide (MgO) and tetraethylenepentamine (TEPA). The use of either of these additives in field applications...
Descriptors: ...OXIDATION;
 32/3,K/33 (Item 3 from file: 103) Links
    Fulltext available through:
                                              ScienceDirect
Energy SciTec
(c) 2007 Contains copyrighted material. All rights reserved.
00884394
               EDB-82-059236
Title: Improved explosive composition
                                                        ( Patent )
Patent No.: PT 54166
Patent Assignee(s): African Expl Chem Inds Ltd.
Patent Date Filed: Priority date 16 Jul 1968, South Africa
Publication Date: 25 Feb 1971
```

Language: Portuguese

Abstract: ...the preparation of a slurry- detonating explosive compound which consists essentially of a granulated inorganic oxidizing salt which is partially dissolved and partially suspended in an aqueous medium. The viscous compound.....a molasses composition, and has added a highly combustible fuel, a galactomanan and a synthetic polysaccharide gelling agent, both soluble in water, and a viscosity controlling agent. The synthetic polysaccharide may be carboxymethyl cellulose. The gelling agent may be guar gum. The proportions of carboxymethyl.....to 8% by wt of molasses; from 0 to 15% of fuel (particulates of aluminum, magnesium, silicon, sugar or sulfur): and from 0.2 to 5% by wt of carboxymethyl cellulose or sulfur); and from 0.2 to 5% by wt of carboxymethyl cellulose... Descriptors: ...OXIDIZERS;

32/3,K/34 (Item 4 from file: 103) Links **Energy SciTec** (c) 2007 Contains copyrighted material. All rights reserved. EDB-78-065567 00371164 Title: Characterization of starch breakdown in the intact spinach chloroplast Author(s): Peavey, D.G.; Steup, M.; Gibbs, M. Affiliation: Brandeis Univ., Waltham, MA Source: Plant Physiol. (United States) v 60:2. Coden: PLPHA p 305-308 Publication Date: Aug 1977 Language: English Abstract: ...inhibitory effect of ionophore A 23187 on starch breakdown was reversed by the addition of magnesium ions. The formation of maltose but not glucose was impaired by the ionophore. The inhibition....phosphate. Fructose 1,6-bisphosphate and ribose 5-phosphate did not affect the rate of polysaccharide metabolism but increased the flow of isotope into maltose. Starch breakdown was unaffected by the....cleavage; (b) ATPrequired in the Embden-Meyerhof pathway is generated by substrate phosphorylation in the oxidation of glyceraldehyde 3-phosphate to glycerate 3-phosphate; and (c) the oxidative pentose phosphate pathway... Descriptors: ...MAGNESIUM; 32/3,K/35 (Item 1 from file: 155) Links Fulltext available through: USPTO Full Text Retrieval Options MEDLINE(R) (c) format only 2007 Dialog. All rights reserved. PMID: 17503859 Redox reactions of ferricyanide ions in layer-by-layer deposited polysaccharide films: a significant effect of the type of polycation in the films. Wang Baozhen; Anzai Jun-ichi Graduate School of Pharmaceutical Sciences, Tohoku University, Aoba-ku, Sendai 980-8578, Japan.
Langmuir - the ACS journal of surfaces and colloids (United States), 23 (13) p7378-84, ISSN: 0743-7463--Print Journal Code: 988273 Jun 19 2007 Journal Code: 9882736 Publishing Model Print-Electronic Document type: Journal Article; Research Support, Non-U.S. Gov't Languages: ENGLISH Main Citation Owner: NLM Record type: MEDLINE; Completed Redox reactions of ferricyanide ions in layer-by-layer deposited polysaccharide films: a significant effect of the type of polycation in the films.

Redox reactions of ferricyanide ions, [Fe(CN)6]3-, in polysaccharide thin films that were prepared by layer-by-layer (LbL) deposition on the surface of....that the redox reactions of [Fe(CN)6]3- ions proceed smoothly in the LbL polysaccharide films. It was found that [Fe(CN)6]3- ions are concentrated in the films... ; Anions--chemistry--CH; Cations--chemistry--CH; Electrochemistry; Glucuronic Acid--chemistry--CH; Hexuronic Acids--chemistry--CH; Hydrogen-Ion Concentration; Oxidation-Reduction; Polyethyleneimine --chemistry--CH; Polyethylenes--chemistry--CH; Quaternary Ammonium Compounds--chemistry--CH Chemical Name: Alginates; Anions; Cations; Ferricyanides; Hexuronic Acids;

Page 84

Membranes, Artificial; Polyethylenes; Quaternary Ammonium Compounds; hexacyanoferrate III; poly-N,N-dimethyl...

32/3,K/36 (Item 2 from file: 155) Links
Fulltext available through: USPTO Full Text Retrieval Options
MEDLINE(R)
(c) format only 2007 Dialog. All rights reserved.
15387814 PMID: 15743185
Cationic polysaccharides as antiprion agents.

Yudovin-Farber Ira; Azzam Tony; Metzer Esther; Taraboulos Albert; Domb Abraham J
Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty
of Medicine, The Hebrew University of Jerusalem, Jerusalem 91120, Israel.
Journal of medicinal chemistry (United States) Mar 10 2005, 48 (5) p1414-20
ISSN: 0022-2623--Print Journal Code: 9716531
Publishing Model Print

Journal of medicinal chemistry (United States) Mar 10 2005 , 48 (5) p1414-20 , ISSN: 0022-2623--Print Journal Code: 9716531
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Cationic polysaccharides were synthesized by conjugation of various oligoamines to oxidized polysaccharides by reductive amination and tested for antiprion activity. Polycations of dextran, pullulan and arabinogalactan....in elimination of PK-resistant PrP from chronically infected N2a-M cells, regardless of the polysaccharide used. Dextran-spermine conjugates were modified with oleic acid and with methoxypoly(ethylene glycol) (MPEG...; Animals; Cations; Cell Line, Tumor; Dextrans--chemistry--CH; Endopeptidase K--metabolism--ME; Galactans--chemistry--CH; Glucans --chemistry...
Chemical Name: Cations; Galactans; Glucans; Polyamines; Polysaccharides; PrPSc Proteins; Pentosan Sulfuric Polyester; Dextrans; arabinogalactan; pullulan; Endopeptidase K

32/3,K/37 (Item 3 from file: 155) Links
Fulltext available through: USPTO Full Text Retrieval Options
MEDLINE(R)
(c) format only 2007 Dialog. All rights reserved.
14732442 PMID: 14738994
Studies on the nature of interaction of iron(III) with alginates.

Sreeram Kalarical Janardhanan; Yamini Shrivastava H; Nair Balachandran Unni Chemical Laboratory, Central Leather Research Institute, Adyar, Chennai 600 020, India. Biochimica et biophysica acta (Netherlands) Jan 22 2004 , 1670 (2) p121-5. ISSN: 0006-3002--Print Journal Code: 0217513 Publishing Model Print Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: MEDLINE; Completed The interactions between the polysaccharide alginate and iron(III) were investigated. The solution properties were studied through pH-metry, viscometry... ; Binding Sites; Cations; Circular Dichroism; Ferric Compounds; Hydrogen-Ion Concentration; Macrocystis; Molecular Conformation; Oxidation-Reduction; Particle Size; Potentiometry; Solutions --chemistry--CH; Tanning--trends--TD; Viscosity Chemical Name: Alginates; Cations; Ferric Compounds; Solutions; Iron; ferric chloride

32/3,K/38 (Item 4 from file: 155) Links
Fulltext available through: Nature American, Inc. (Publisher Group) USPTO
Full Text Retrieval Options
Page 85

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MEDLINE(R)
(c) format only 2007 Dialog. All rights reserved.
            PMID: 14712304
14719653
Dextran-spermine polycation: an efficient nonviral vector for in vitro and in vivo
gene transfection.
Hosseinkhani H; Azzam T; Tabata Y; Domb A J
Department of Biomaterials, Field of Tissue Engineering, Kyoto University, Kyoto,
Japan.
Gene therapy (England)
Journal Code: 9421525
                             Jan 2004 , 11 (2) p194-203 , ISSN: 0969-7128--Print
Publishing Model Print
Document type: Journal Article; Research Support, Non-U.S. Gov't Languages: ENGLISH Main Citation Owner: NLM
Record type: MEDLINE; Completed
Dextran-spermine cationic polysaccharide was prepared by means of reductive
amination between oxidized dextran and the natural oligoamine spermine. The formed
Schiff-base imine-based conjugate was reduced...
  3T3 Cells; Animals; Cations; Cell Line; Gene Expression; Humans; Injections,
Intramuscular; Liver--enzymology--EN; Mice; Polyethylene Glycols;
beta-Galactosidase...
Chemical Name: Cations; Polyethylene Glycols; Spermine; Dextrans; DNA;
beta-Galactosidase
 32/3,K/39 (Item 5 from file: 155) Links
   Fulltext available through:
                                   USPTO Full Text Retrieval Options
MEDLINE(R)
(c) format only 2007 Dialog. All rights reserved. 13716795 PMID: 11960493
Polysaccharide-oligoamine based conjugates for gene delivery.
Azzam Tony; Eliyahu Hagit; Shapira Libi; Linial Michal; Barenholz Yechezkel; Domb
Abraham J
Department of Medicinal Chemistry and Natural Products, School of Pharmacy, Faculty
of Medicine, The Hebrew University, Jerusalem 91120, Israel.
Journal of medicinal chemistry ( United States )
                                                     Apr 25 2002 ,
                                                                       45 (9) p1817-24 .
 ISSN: 0022-2623--Print
                           Journal Code: 9716531
Publishing Model Print
Document Type: Journal Article; Research Support, Non-U.S. Gov't; Research Support.
U.S. Gov't, Non-P.H.S.
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed Polysaccharide-oligoamine based conjugates for gene delivery.
...natural tetramine, conjugated to dextran or arabinogalactan. These polycations
were prepared by reductive amination of oxidized polysaccharides with the desired
oligoamines. The Schiff base conjugates thus obtained were reduced to the...
  Cations; Cell Line; Genes, Reporter; Green Fluorescent Proteins; Human Growth
Hormone--genetics--GE; Humans; Luciferases--genetics...
Chemical Name: Cations; Luminescent Proteins; Polyamines; Polysaccharides; Human
Growth Hormone; Green Fluorescent Proteins; Luciferases
 32/3,K/40 (Item 1 from file: 393) Links
Beilstein Database - Abstracts
(c) 2007 Beilstein GmbH. All rights reserved.
Beilstein Abstract Id: 6072827
Title: Synthesis of a trisaccharide fragment corresponding to the lipopolysaccharide
region of Vibrio parahaemolyticus
Document Type: Journal
                               Record Type: Abstract
Author: Straten, N. C. R. van; Kriek, N. M. A. J.; Timmers, C. M.; Wigchert, S. C.
                                         Page 86
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M.; Marel, G. A. van der; Boom, J. H. van Citation: J.Carbohydr.Chem. (1997) Series: 16-6, 947-966 CODEN: JCACDM Language: English Abstract Language: English Title: Synthesis of a trisaccharide fragment corresponding to the lipopolysaccharide region of Vibrio parahaemolyticus Abstract: ... glycero- alpha -D-manno-heptopyranoside (22), obtained after hydroxymethylation of aldehyde 17 with (phenyldimethylsilyl)met hyl magnesium chloride, followed by protective group manipulations, gave alpha -linked dimer 23.0xidative removal of the... ... group manipulations (-) 26), and condensation with ethyl 1-thio- beta -D-glucopyranosyl donor 27 furnished trisaccharide 28. Oxidation of the C-6 in 29 and hydrogenolysis yielded target trisaccharide 2, a fragment of the innercore lipopolysaccharide region of Vibrio parahaemolyticus, serotype 02. 32/3,K/41 (Item 2 from file: 393) Links Beilstein Database - Abstracts (c) 2007 Beilstein GmbH. All rights reserved. Beilstein Abstract Id: 5507755 Title: THE EFFECT OF MODIFIED PECTIN, PECTIN FRAGMENTS AND CATIONS ON PHYTOPHTHORA PALMIVORA ZOOSPORES Document Type: Journal Record Type: Abstract
Author: Zhang, Qisen; Griffith, Julia M.; Moore, John G.; Iser, Joanne R.; Grant, Citation: Phytochemistry (1990) Series: 29-3, 695-700 CODEN: PYTCAS Language: English Abstract Language: English Title: THE EFFECT OF MODIFIED PECTIN, PECTIN FRAGMENTS AND CATIONS ON PHYTOPHTHORA PALMIVORA ZOOSPORES Abstract: ... were compared as inducers of differentiation in zoospores of the plant pathogen Phytophthora palmivora Periodate oxidation or reduction of pectin completely destroyed all capacity of the polymer to induce cell differentiation. Methylation distroyed the capacity of the pectin to induce germination, but the methylated polysaccharide induced zoospore rounding and at least partial encystment at low concentrations. Some oligomers prepared from... 32/3,K/42 (Item 1 from file: 399) Links Fulltext available through: ScienceDirect CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. CA: 142(20)379453n **PATENT** Polysaccharide phyllosilicate absorbent or superabsorbent nanocomposite materials Inventor (Author): Berrada, Mohammed; Chevigny, Stephane; Thibodeau, Claude Location: Can., Assignee: Le Groupe Lysac Inc. Patent: PCT International; WO 200530279 A1 Date: 20050 Application: WO 2004CA1760 (20040929) *CA 2443059 (20030929) Date: 20050407 Pages: 92 pp. CODEN: PIXXD2 Language: English Patent Classifications: Class: A61L-015/28A; A61L-015/22B; A61L-015/60B; B01J-020/22B Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW Designated Regional: BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA;

Page 87

GN; GQ; GW; ML; MR; NE; SN; TD; TG

32/3,K/43 (Item 2 from file: 399) Links Fulltext available through: ScienceDirect CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. 131303223 CA: 131(22)303223q PATENT Small particles having walls made of cross-linked proteins and polysaccharides and bearing surficial hydroxam groups for chelating metal ions, methods for their production and applications in cosmetics, pharmaceuticals, and foodstuffs Inventor (Author): Perrier, Eric; Buffevant, Chantal; Bonnet, Isabelle; Levy, Marie-Christine Location: Fr. Assignee: Coletica Patent: Germany Offen.; DE 19916896 Al Date: 19991021 Application: DE 19916896 (19990414) *FR 984611 (19980414) Pages: 28 pp. CODEN: GWXXBX Language: German Patent Classifications: Class: B01J-013/02A; A61K-009/50B; A61K-049/00B; A61K-051/12B; A23P-001/04B; C02F-001/58B; A61K-007/50B; C09K-015/04B 32/3,K/44 (Item 3 from file: 399) Links Fulltext available through: USPTO Full Text Retrieval Options CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. **JOURNAL** CA: 94(11)84402j Effect of the structure of polysaccharide on their oxidation by cerium(IV), manganese(III), and vanadium(V) ions
Author: Il'in, A. A.; Gal'braikh, L. S.; Morin, B. P.
Location: Mosk. Tekst. Inst., Moscow, USSR
Journal: Cellul. Chem. Technol. Date: 1980 Volume: 14 Number: 3 Pages: 327-38 CODEN: CECTAH ISSN: 0576-9787 Language: Russian 32/3,K/45 (Item 1 from file: 434) Links Scisearch(R) Cited Ref Sci (c) 2006 The Thomson Corp. All rights reserved. 05745196 Genuine Article#: SN054 No. References: 18 PI-ELECTRON SPIN-DENSITY DISTRIBUTIONS AND G-VALUES IN SEMIQUINONE CATIONS Author: FELIX CC; PRABHANANDA BS Corporate Source: MED COLL WISCONSIN, DEPT RADIOL, NATL BIOMED ESR CTR/MILWAUKEE//WI/53226; TATA INST FUNDAMENTAL RES, CHEM PHYS GRP/BOMBAY 400005//INDIA/ Journal: JOURNAL OF CHEMICAL PHYSICS , 1984 , V 80 , N7 , P 3078-3081 Language: ENGLISH Document Type: ARTICLE PI-ELECTRON SPIN-DENSITY DISTRIBUTIONS AND G-VALUES IN SEMIQUINONE CATIONS Research Fronts: 84-0212 001 (ELECTRON-SPIN-RESONANCE STUDIES OF POLYSACCHARIDE OXIDATION, SEMIQUINONE REDUCTION AND OTHER REACTIONS)

32/3,K/46 (Item 1 from file: 35) Links Dissertation Abs Online

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ORDER NO: AADAA-I3040281

Bioflocculation: Implications for activated sludge properties and wastewater

treatment

Author: Murthy, Sudhir Narasimha

Dearee: Ph.D. Year: 1998

Corporate Source/Institution: Virginia Polytechnic Institute and State University (

Source: Volume 6301B of Dissertations Abstracts International. PAGE 456 . 152 PAGES $\,$

ISBN: 0-493-53486-5

all processes related to the above properties. In these studies, it was shown. that divalent cations such as calcium and magnesium improved activated sludge that divalent cations such as calcium and magnesium improved activated sludge properties, whereas monovalent cations such as sodium, potassium and ammonium ions were detrimental to these properties. The divalent cations promoted bioflocculation through charge bridging mechanisms with negatively charged biopolymers (mainly protein and polysaccharide). It was found that oxidized iron plays a major role in bioflocculation and determination of activated sludge properties through surface interactions between iron and biopolymers. Oxidized iron was effective in removing colloidal biopolymers from solution in coagulation and conditioning studies. The... ... experiments evaluating effects of potassium and ammonium ions on settling and dewatering properties; effects of magnesium on settling properties; effects of sodium, potassium, calcium and magnesium on effluent quality; effect of solids retention time on effluent quality; and evaluation of floc properties during aerobic retention time on effluent quality; and evaluation of floc properties during aerobic and thermophilic digestion. A floc model is proposed in which calcium, magnesium and iron are important to bioflocculation and the functionality of aeration tanks, settling tanks, dewatering...

32/3,K/47 (Item 1 from file: 135) Links NewsRx Weekly Reports (c) 2007 NewsRx. All rights reserved.

0000574566 (USE FORMAT 7 OR 9 FOR FULLTEXT)

New chemiluminescence study findings have been reported by M. Pletenikova and colleagues

Life Science Weekly, July 31, 2007, p.3893

DOCUMENT TYPE:

Expanded Reporting LANGUAGE: English

RECORD TYPE:

FULLTEXT

Word Count:

239

...TEXT: bonds in cellulose and 1,6-alpha bonds in dextran is preceded by free radical oxidation of carbon 6 of glucopyranose unit with formation of carboxyl groups and water contributing to the subsequent induced degradation of polysaccharide," wrote M. Pletenikova and colleagues. The researchers concluded: "MgO which remains in polysaccharide after its impregnation by methoxy magnesium methyl carbonate (MMMC) promotes the reaction of terminal semiacetal groups and/or hydroperoxides which has considerably higher quantum yield of light emission." Pletenikova and colleagues published their study in Carbohydrate Polymers (New chemiluminescence study findings have Page 89

search.txt been reported by M. Pletenikova and colleagues. . Carbohydrate Polymers , 2007;69(1):50-64). For more information, contact J. Rychly, Slovak Academy Science...

...Excellence Degradat Biopolymers, Dubravska Cesta 9, Bratislava 84236, Slovakia. Publisher contact information for the journal Carbohydrate Polymers is: Elsevier Science Ltd., the Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, Oxon, England. Keywords: Slovakia, Bratislava, Cellulose, Chemiluminescence, Degradation, Dextran, Pullulan, Thermal Oxidation. This article was prepared by Life Science Weekly editors from staff and other reports. Copyright...

32/3,K/48 (Item 2 from file: 135) Links NewsRx Weekly Reports (c) 2007 NewsRx. All rights reserved.

0000431827 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Kyoto University, Japan, researchers release new medical data

Biotech Business Week, February 5, 2007, p.2178

DOCUMENT TYPE: Expanded Reporting LANGUAGE: English

RECORD TYPE: FULLTEXT

Word Count: 1152

... respectively. Ammonium chloride-induced intracellular acidification significantly stimulated the hMATE2-K-dependent transport of organic cations such as TEA, MPP, procainamide, metformin, N1-methylnicotinamide, creatinine, guanidine, quinidine, quinine, thiamine, and verapamil...

...engineered scaffolds and nonviral gene carrier.

"As a carrier of plasmid DNA, dextran-spermine cationic polysaccharide was prepared by means of reductive-amination between oxidized dextran and the natural oligoamine, spermine," scientists writing in the journal report.

According to the...

32/3,K/49 (Item 1 from file: 357) Links
Fulltext available through: USPTO Full Text Retrieval Options
Derwent Biotech Res.
(c) 2007 The Thomson Corp. All rights reserved.
0419677 DBA Accession No.: 2007-05615
Expression and characterization of alpha-(1,4)-glucan branching enzyme Rv1326c of Mycobacterium tuberculosis H37Rv bacterium recombinant enzyme purification and characterization via plasmid expression in host cell for glycogen biosynthesis

Author: GARG SK; ALAM MS; KISHAN KVR; AGRAWAL P
Corporate Affiliate: Inst Microbial Technol
Corporate Source: Agrawal P, Inst Microbial Technol, Sector 39A, Chandigarh 160036, India
Journal: PROTEIN EXPRESSION AND PURIFICATION (51, 2, 198-208) 2007
Page 90

ISSN: 1046-5928 Language: English

32/3,K/50 (Item 2 from file: 357) Links

Fulltext available through: ScienceDirect

Abstract: ...by the cleavage of an alpha-(1,4)-glucosidic linkage and subsequent transfer of cleaved oligosaccharide to form a new alpha-(1,6)-branch. A single glgB gene Rv1326c is present... ...the substrate. Enzyme activity was optimal at pH 7.0, 30 degrees C and divalent cations such as Zn2+ and Cu2+ inhibited activity. CD spectroscopy, proteolytic cleavage and mass spectroscopy analyses.....dependent conformational states. These conformations have different surface hydrophobicities as evidenced by ANS-fluorescence of oxidized and reduced GlgB. Although the conformational change did not affect the branching enzyme activity, the...
Descriptors: ...coli host cell, metal affinity, ionexchange chromatography, appl. glycogen biosynth. EC-2.4.1.18 polysaccharide bacterium DNA sequence (26, 11)

Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved. 0359290 DBA Accession No.: 2005-04994 PATENT Producing bacterial cellulose applied as wound dressing for burns and surgical wounds, by culturing Acetobacter xylinum in medium for producing surface cellulose membrane, isolating membrane from culture liquid and purifying membrane Bacillus subtilis and Saccharomyces cerevisiae immobilization for use in vulnerary therapy Author: BIELECKI S; KRYSTYNOWICZ A; CZAJA W Patent Assignee: POLITECHNIKA LODZKA 2005 Patent Number: WO 200503366 Patent Date: 20050113 WPI Accession No.: 2005-091825 (200510) Priority Application Number: PL 203L-361067 Application Date: 20030703 National Application Number: WO 2004PL51 Application Date: 20040702 Language: English Abstract: ...burns and surgical wounds; and (4) modifying (M4) cellulose membranes, comprising: (a) carrying out selective oxidation of bacterial cellulose using oxidative agents; (b) saturating the membrane with a solution of (in.....glucose (10-30), yeast extract (2.5-12.5), peptone (2.5-12.5), hydrated magnesium sulfate (MgSO4x7H2O) (1.25-6.25), sodium biphosphate (Na2HPO4) (1.25-7), citric acid (0....the constituents by mass (in wt.parts) glucose (20), yeast extract (5), peptone (5), hydrated magnesium sulfate (MgSO4.7H2O), sodium biphosphate (Na2HPO4), citric acid (1.15), ethanol (10) to distilled water ... Descriptors: Acetobacter xylinum cellulose prep., purification, Bacillus subtilis, Saccharomyces cerevisiae immobilization, appl. vulnerary bacterium fermentation polysaccharide fungus yeast (24, 08)

32/3,K/51 (Item 3 from file: 357) Links Fulltext available through: ScienceDirect Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved. 0312168 DBA Accession No.: 2003-13308 PATENT Novel glucan produced by glucosyltransferase activity of lactic acid bacterium on sucrose substrate, and having backbone consisting of alpha (1,3)- and alpha (1,6)-linked anhydroglucose units, useful as thickener glucan production using bacterium enzyme useful for probiotic, prebiotic and foodstuff

Author: VAN GEEL-SCHUTTEN G H

Patent Assignee: NEDERLANDSE ORG TOEGEPAST 2003

Patent Number: WO 200308618 Patent Date: 20030130 WPI Accession No.: 2003-289780 (200328)

Priority Application Number: EP 2001202841 Application Date: 20010725 National Application Number: WO 2002NL495 Application Date: 20020722

Language: English Abstract: ...LMG P-20350; and (8) a chemically modified glucan, which is obtained by 2,3-oxidation, 6-oxidation, phosphorylation, acylation, alkylation, Page 91

hydroxyalkylation, carboxymethylation, amino-alkylation of one or more AGU of (I). BIOTECHNOLOGY.....trihydrate (5), sodium citrate dihydrate (2.42), ammonium chloride (1.32), dipotassium hydrogen phosphate (2), magnesium sulfate heptahydrate (0.2), manganese sulfate heptahydrate (0.05), sorbitan mono-oleate (1), vitamins (in....and 15-30 % of 1-linked (terminal) glucose units. The average molecular weight of the polysaccharide was established to be 2x10 to the power 5 Da. By polymerase chain reaction (PCR... Descriptors: ...transfer expression in host cell, appl. thickener, prebiotic, bioactive agent, anticorrosion agent, probiotic, food ind. polysaccharide lactic acid bacterium DNA sequence protein sequence (22, 22)

ScienceDirect

32/3,K/52 (Item 4 from file: 357) Links Fulltext available through: ScienceD

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Derwent Biotech Res.

0287130 DBA Accession No.: 2002-08977 PATENT Protein with glucosyltransferase activity derived from Lactobacillus Reuteri vector-mediated recombinant enzyme gene transfer and expression in plant cell, algorithm, polymerase chain reaction and DNA primer for use in glucan preparation Author: VAN GEEL SCHUTTEN G H; DIJKHUIZEN L; RAHAOUI H; LEER R J Patent Number: WO 200190372 Patent Date: 20011129 WPI Accession No.: 2002-147583 (200219) Patent Assignee: NEDERLANDSE ORG TOEGEPAST Priority Application Number: EP 2000201871 Application Date: 20000525 National Application Number: WO 2001NL393 Application Date: 20010523 Language: English Abstract: ...5) producing (I) comprising culturing a host cell (V); (6) a process of producing an oligosaccharide or polysaccharide of interest using (I) or (V); (7) a chemically modified glucan (G) obtained by 2,3- oxidation, 6-oxidation, phosphorylation, acylation, hydroxyalkylation, carboxymethylation, aminoalkylation of 1 or more anhydroglucose units of a glucan comprising....centrifuged and resuspended in protoplast buffer (5 mg/ml) pH 6.1 supplemented with lactose, magnesium chloride, polyethylene glycol 2000, 0.1 M ethylenediaminetetraacetic acid (EDTA), lysozyme, and mutanolysine 10U/ml... Descriptors: ...polymerase chain reaction, DNA primer, appl. glucanprep. lactic acid bacterium bacterium fermentation enzyme DNA amplification polysaccharide protein sequence (21, 31)

32/3,K/53 (Item 5 from file: 357) Links Fulltext available through: ScienceDirect Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved. 0146524 DBA Accession No.: 93-04576 Biomass production from carbon dioxide by a marine hydrogen- oxidizing bacterium Hydrogenovibrio marinus - carbon dioxide-fixation and single cell protein and polysaccharide production in high cell density fermentation (conference paper)

Author: Igarashi Y; Nishihara H; Kodama T Corporate Source: Department of Agricultural Chemistry, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan.

Journal: Biochem.Eng.2001 (719-22)

CODEN: 9999X 1992

Language: English Biomass production from carbon dioxide by a marine hydrogen- oxidizing bacterium Hydrogenovibrio marinus - carbon dioxide-fixation and single cell protein and polysaccharide production in high cell density fermentation (conference paper) Abstract: Biomass production from CO2 by a marine hydrogen-oxidizing bacterium, Hydrogenovibrio marinus gen. nov. sp. nov. MH-110, was studied. High cell density culture....and exponential growth continued to an OD of 10. Growth was regained Page 92

by addition of magnesium ions, and continued until the dissolved oxygen value decreased to almost zero, when cell density.....increased and reached 33 g/l dry wt. after 53 hr. Significant amounts of glucose polysaccharide were produced by oxygen-limited cultures. The total sugar content reached 10 g/l after 53 hr culture, and 6.0 g polysaccharide (mol.wt. 5,000,000, with a glycogen-like structure) was recovered from 1.6 l culture broth. MH-110 should be useful for SCP and polysaccharide production from CO2. (5 ref) Descriptors: glycogen-like polysaccharide prep., carbon dioxide-fixation, Hydrogenovibrio marinus high cell density fermentation, pot. SCP prep. marine hydrogen-oxidizing bacterium

32/3,K/54 (Item 6 from file: 357) Links Fulltext available through: ScienceD ScienceDirect Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved. 0113977 DBA Accession No.: 91-01619 PATENT Hyalurate salt with low degree of polymerization - hyaluronic acid preparation using Streptococcus or Pasteurella sp. culture Patent Assignee: Kibun; Kibun-Food-Chem. 1990 Patent Number: JP 2245193 Patent Date: 900928 WPI Accession No.: 90-339243 (9045 Priority Application Number: JP 8966340 Application Date: 890320 National Application Number: JP 8966340 Application Date: 890320 Language: Japanese Abstract: ...producing Streptococcus or Pasteurella strain, purification of hyaluronic acid, and treatment with a chlorine-type oxidizing agent. The oxidizing agent may be sodium hyposulfite or potassium hypochlorite, and is added at 50-800 ppm... ...medium (containing 2.5% glucose, 1.5% peptone, 0.5% yeast extract and 0.05% magnesium sulfate, pH 6.9-7.1) at 35 deg with aeration at 1.5 vvm... ...of the product (1.98 g) was 510,000, compared to 2,530,000 without oxidation treatment. (4pp) Descriptors: hyalurate salt synth. with low degree of polymerization, hyaluronic acid prep., purification, treatment with oxidizing agent, e.g. sodium hyposulfite, potassium hypochlorite, Streptococcus, Pasteurella sp. culture polysaccharide C-acid C-amide bacterium

32/3,K/55 (Item 1 from file: 391) Links Beilstein Database - Reactions (c) 2007 Beilstein GmbH. All rights reserved. Reaction Id: 5782540 Reactants BN=774890 2-hydroxy-benzoic acid No. of Reaction Details: 121 No. of References: 165 Reaction Details ...16) Classification: Chemical behaviour (half reaction) Reagent: Na(1+)Conditions: complex formation, other cations (Ref. 17) Classification: Chemical behaviour (half reaction) Reagent: I2 (aq)
Temp: 25 C....Solvent: methanol Temp: 25 C Conditions: Thermodynamic functions for dissociation and for complexing alkali-metal cations. Subject Studied: Thermodynamic data (Ref. 20) Classification: Chemical behaviour (half reaction) Reagent: human.....Clo2 Solvent: H2O Temp: 23 C

```
ph: 1.5 - 6
  Subject Studied: Kinetics
  Reaction Type: Oxidation (Ref. 40)
  Classification: Chemical behaviour (half reaction)
  Subject Studied: Kinetics (Ref. 41....half reaction)
  Reagent: TiO2
  ph: 4.50
  Conditions: Photolysis
  Subject Studied: Quantum yield
  Reaction Type: Oxidation (Ref. 53)
Classification: Chemical behaviour (half reaction)
  Subject Studied: Equilibrium constant (Ref. 51...
References
      ..2000)431 - 440;
     20, 5723980 Pointúd, Yvon ; Juillard, Jean Interactions between Metal Cations
and the Ionophore Lasalocid. Part 2. - Gibbs Functions, Enthalpies and Entropies for
Complexation of Alkali-metal Cations by Lasalocid and Bromolasalocid JCFTAR;
J.Chem.Soc.Faraday Trans.1; 84-4(1988)959.....Singh, Vijay P.; Pandey, Indra M.; Sharma, Subhas B. Kinetics of Chromium Acid Oxidation of Some Hydroxy Acids JICSAH
; J.Indian Chem.Soc.; 62 (1985)64-66.....1967)2142-2144

165, 5836396 Foye, William O.; Kulapaditharom, Vilai Inhibition of Mucopolysaccharide Sulfation Using Rabbit Liver Sulfotransferases JPMSAE; J.Pharm.Sci.; 74-3(1985)355-358;
 32/3,K/56 (Item 1 from file: 8) Links
    Fulltext available through:
                                        USPTO Full Text Retrieval Options
Ei Compendex(R)
(c) 2007 Elsevier Eng. Info. Inc. All rights reserved.
              E.I. Monthly No: EI7405029068
03366847
Title: CARBOHYDRATE STABILIZATION WITH IODIDE IN OXYGEN BLEACHING OF KRAFT PULPS.
Author: Minor, James L.; Sanyer, N.
Corporate Source: US Dep of Agric, Forest Serv, Madison, Wis Source: Tappi v 57 n 2 Feb 1974 p 109-112 Publication Year: 1974
CODEN: TAPPAP
                   ISSN: 0039-8241
Language: ENGLISH
Title: CARBOHYDRATE STABILIZATION WITH IODIDE IN OXYGEN BLEACHING OF KRAFT PULPS.
Abstract: ...the alkaline bleaching liquors. The effect was particularly distinct under weakly alkaline conditions in which magnesium compounds alone offer little
stabilization. The simultaneous addition of both stabilizers gave complementary and additive results. Improved strength properties reflected the increased
polysaccharide stabilization. 8 refs.
Descriptors: ...Oxidation; IODINE COMPOUNDS
 32/3,K/57 (Item 1 from file: 149) Links
TGG Health&Wellness DB(SM)
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02945550
                Supplier Number: 107835435 (USE FORMAT 7 OR 9 FOR FULL TEXT )
Inflammatory bowel disease part I: ulcerative colitis--pathophysiology and
conventional and alternative treatment options.
Head, Kathleen A.; Jurenka, Julie S.
Alternative Medicine Review , 8 , 3 , 247(37)
August ,
2003
  Publication Format: Magazine/Journal
ISSN: 1089-5159
Language: English
Record Type: Fulltext Target Audience: Academic; Professional
Word Count: 19225
                       Line Count: 01826
                                                Page 94
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- ...of oxidative stress, a deranged colonic milieu, abnormal glycosaminoglycan (GAG) content of the mucosa, decreased oxidation of short chain fatty acids (SCFAs), increased intestinal permeability, increased sulfide production, and decreased methylation...
- ...biopsies of UC patients were analyzed and shown to have increased reactive oxygen intermediates, DNA oxidation products (8-OHdG), and iron in inflamed tissue compared to controls. Decreased levels of copper...
- ...II detoxification, and lipid synthesis for cell membrane integrity in the colonocytes depend on butyrate oxidation. (47) Impaired metabolism of SCFAs has been implicated as a factor in UC.

 Hond et...
- ...C(O.sup.2) in the breath. Patients with active UC had significantly lower butyrate oxidation than patients in remission (who had normal butyrate oxidation) or controls. Three patients with inactive disease had decreased butyrate oxidation and interestingly, all three relapsed within a few weeks. (48) Perhaps decreased oxidation of SCFAs is a good predictor of possible relapse and occurs before other signs of inflammation. Because normal oxidation was observed in patients in remission, faulty SCFA oxidation is likely to be a result rather than a primary cause of ulcerative colitis.

 Other researchers compared the rate of butyrate, glucose, and glutamine oxidation to carbon dioxide in colonoscopy biopsy

Other researchers compared the rate of butyrate, glucose, and glutamine oxidation to carbon dioxide in colonoscopy biopsy specimens from 15 patients with quiescent or mild colitis to specimens from 28 controls with normal colonic mucosa. Butyrate, but not glucose or glutamine, oxidation was significantly impaired in the UC patients compared to controls, even though the disease was...

- ...in patients with UC. Hydrogen sulfide can potentially damage the gut mucosa by inhibiting butyrate oxidation in the mitochondria, essentially starving the cotonocyte (Figure 3). In experiments on human colonocytes isolated from colectomy patients, hydrogen sulfide and other sulfur compounds inhibited butyrate oxidation by 75 percent in the distal colon and 43 percent in the ascending colon. The authors of the study conclude that the "metabolic effects of sodium hydrogen sulfide on butyrate oxidation along the length of the colon closely mirror metabolic abnormalities observed in active ulcerative colitis...
- ...sulfides on colonocytes. Isolated colonocytes from rat and human specimens were tested by measuring the oxidation of butyrate in the presence of hydrogen sulfide, followed by introduction of methyl donors to
- ...permeability and contributing to colonic bleeding. Based on previous animal studies demonstrating ibuprofen inhibited SCFA oxidation in isolated mitochondria of mouse liver, (60) Roediger and Millard studied ibuprofen's effect on...
- ...and found that, at concentrations of 2.0-7.5 mmol/L, ibuprofen selectively inhibited oxidation of butyrate). (61) This concentration may not occur at doses typically consumed.

 Other NSAIDs have...
- ...of 104 patients with UC and CD found, using a dietary recall questionnaire, that total carbohydrate, refined sugar, and starch intakes immediately prior to onset of the disease were significantly higher
- ...have higher fecal levels of sulfide than controls, (71) although 5-ASA appears to inhibit oxidation of butyrate, potentially interfering Page 95

with normal SCFA metabolism. (72) The implications for long-term use...in a clinical study of 69 patients with IBD (46 with UC), that beta-carotene, magnesium, selenium, iron, copper, and zinc were significantly lower in newly diagnosed patients than in controls...

..antioxidants to counter pro-oxidant effects of mucosal iron, and chelate free iron if necessary.

Magnesium

Magnesium deficiency is prevalent in UC patients, but whether it is a result of disease via...

...from decreased intake remains unclear. In a dietary history study of 54 UC patients, high magnesium intake was shown to reduce the risk of inflammatory bowel disease, suggesting an association between...

.development of UC. (65) Another study demonstrated that in 46 newly diagnosed UC patients, serum magnesium concentrations were significantly lower than in controls, suggesting a possible etiological role for magnesium deficiency. (97) Despite sometimes-normal serum magnesium levels, intracellular magnesium concentrations are frequently low in UC patients. (109)

Selenium

Like magnesium, serum and plasma selenium levels are significantly (p<0.05) lower in newly diagnosed UC...

...138) and possibly improve the mucosal barrier of the colon. (139) Larch arabinogalactan is a polysaccharide powder derived from the wood of the larch tree (Larix species) and comprised of approximately ...mcg-1 mg daily

500-1,000 mg daily ** Calcium 30-60 mg daily *** Iron 300-500 mg daily Magnesium 200-400 mcg daily Selenium 15-45 mg daily Zinc

Copper...Gastroenterology 1998; 115:584-590.
(49.) Chapman MA, Grahn MF, Boyle MA, et al. Butyrate oxidation is impaired in the colonic mucosa of sufferers of quiescent ulcerative colitis. Gut 1994;35...

...B, Berson A, et al. Stereoselective and nonstereoselective effects of ibuprofen enantiomers on mitochondrial beta-oxidation of fatty acids. J Pharmacol Exp Ther 1990;255:529-535.

(61.) Roediger WE, Millard S. Selective inhibition of fatty acid oxidation in colonocytes by ibuprofen: a cause of colitis? Gut 1995;36:55-59.

(62.) Ravi...

...to predict the risk of relapse? Digestion 1989;44:217-221. (128.) Grimes DS. Refined carbohydrate, smooth-muscle spasm and disease of the colon. Lancet 1976;1:395-397. (129.) Salyers...

32/3,K/58 (Item 2 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved.
02936772 Supplier Number: 97394711 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The four-step holistic treatment protocol for prostate cancer.

Alonso, Larisa; Waling, Ronald G. Original Internist , 9 , 4 , 14(11) Dec , 2002

Publication Format: Magazine/Journal

ISSN: 1529-4722 Language: English

Record Type: Fulltext Target Audience: Academic; Professional Word Count: 7843 Line Count: 00656

...digested and assimilated. Juices should be consumed immediately after preparation, as nutrients will begin to oxidize. Buy and use organically grown produce to avoid pesticides and other chemical residues contaminating the...

...12): Phase I is carried out by the cytochrome P450 enzyme system and consists of oxidation and reduction reactions. Various nutrients are required in order for the Phase I detoxification system...

...act as potent antioxidants. Other nutrient cofactors required for cytochrome P450 reactions include riboflavin, niacin, magnesium, iron, and certain phytonutrients, such as indoles from cruciferous vegetables and quercetin, have been shown...radicals and singlet oxygen, which, while not itself a free radical, it is a powerful oxidizing agent. (40,41,42) At least two mechanisms are involved in the anticarcinogenic effects of...

...promoting substances in the body. Shiitake Concentrate is made from a mushroom that contains a polysaccharide known as lentinan. Lentinan has been found to possess immune enhancing and antitumor activity. Shuitake...

32/3,K/59 (Item 3 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved.
02924098 Supplier Number: 81760722 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Review of harmful gastrointestinal effects of carrageenan in animal experiments. (Research Review).

Tobacman, Joanne K. Environmental Health Perspectives , 109 , 10 , 983(12) Oct , 2001 Publication Format: Magazine/Journal

ISSN: 0091-6765 Language: English

Record Type: Fulltext Target Audience: Academic Word Count: 11651 Line Count: 01586

Text:

..words: carcinogenesis, carrageenan, carrageenase, diet, furcelleran (furcellaran), hydrolysis, inflammatory bowel disease, nutrition, poligeenan, promoter, sulfated polysaccharide. Environ Health Perspect 109:983-994 (2001). (Online 24 September 2001) http://ehpnet1.niehs.gov...

- ...Federal Regulations. The stipulations for its use include the following: a) it is a sulfated polysaccharide, the dominant hexose units of which are galactose and anhydrogalactose; b) range of sulfate content...
- ...has been implicated in the development of ulcerative colitis, perhaps Page 97

attributable to interference with butyrate oxidation by colonic epithelial cells (114,115). Butyrate has been shown to induce intestinal cellular differentiation...disruption of lysosomes by accumulation of carrageenan by-products or by interference with normal cellular oxidation-reduction processes from sulfate metabolites--emerges from review of the experimental studies. The impact of...

...dextran sulfate sodium, have induced ulcerations and neoplasia, suggesting that the degree of sulfation and polysaccharide molecular weight may be critical for induction of the observed effects (102). The major pieces...

...of the total weight.

Strong negative charge over normal pH range. Associated with ammonium, calcium,

magnesium,

potassium, or sodium salts. Solubility (lambda) is readily soluble in cold or hot aqueous solution...Lee K-H, Wong H-A. The molecular weight and viscosity of the water-soluble polysaccharide (s) from Eucheuma spinosum. Carbohydr Res 81:1-6 (1980).

(29.) Weiner ML. Toxicological properties...

...Ohbayashi F, Hirono I, Shimada T, Williams GM. Absence of genotoxicity of the carcinogenic sulfated polysaccharide carrageenan and dextran sulfate in mammalian DNA repair and bacterial mutagenicity assays. Nutr Cancer 6...

...2000).

(116.) Babidge W, Millard S, Roediger W. Sulfides impair short chain fatty acid beta-oxidation at acyl-CoA dehydrogenase level in colonocytes: implications for ulcerative colitis. Mol Cell Biochem 181...

...Burns WW, Paper DH. Selective inhibition of cell proliferation and DNA synthesis by the polysulphated carbohydrate ??-carrageenan. Cancer Chemother Pharmacol 36:325-334 (1995).

(129.) Coombe DR, Parish CR, Ramshaw IA...

32/3, K/60 (Item 4 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved.
02891190 Supplier Number: 148319659 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The molecular basis of lactose intolerance.

Campbell, Anthony K.; Waud, Jonathan P.; Matthews, Stephanie B. Science Progress , 88 , 3 , 157(46) Fall, 2005

Publication Format: Magazine/Journal

ISSN: 0036-8504 Language: English

Record Type: Fulltext Target Audience: Academic Word Count: 14489 Line Count: 01267

..the normal metabolism of a specific substance. Most commonly, such biochemical intolerances are to a carbohydrate, amino acid or other small organic molecule (8,9). Lactose intolerance is caused by an... ileum. The pH of the large intestine is 5.5-7.

Cellulose is the major polysaccharide in all plant cell walls, made of long chains of 1-4 (beta) linked glucoses...consisting mainly of butane 2, 3 diol and acetoin. The production of acetoin, and its

search.txt oxidation product diacetyl, is the basis of the Voges-Proskauser test widely used in bacteriology. Other...Example

Carbon dioxide, hydrogen, methane, hydrogen Gases

sulphide, oxygen, nitrogen, ammonia

Calcium, sodium, potassium, magnesium, Ions

manganese, iron

Alcohols, diols, aldehydes, short chain fatty acids, dimethyl hydrazine, amino acid degradation... Metabolites

32/3, K/61 (Item 5 from file: 149) Links

TGG Health&Wellness DB(SM)

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Supplier Number: 122660850 (USE FORMAT 7 OR 9 FOR FULL TEXT) 02645469 Two-step synthesis of carbohydrates by selective aldol reactions (Reports)

Northrup, Alan B.; MacMillan, David W.C. Science, 305, 5691, 1752(4)
Sept 17,

2004

Publication Format: Magazine/Journal

ISSN: 0036-8075 Language: English

Record Type: Fulltext; Abstract Target Audience: Academic Word Count: 2040 Line Count: 00174

..applied to the synthesis of carbohydrates on a few occasions; however, the need for iterative oxidation-state adjustments has thus far precluded a broadly used or step-efficient protocol. From a conceptual standpoint, a two-step carbohydrate synthesis can be envisioned based on an iterative aldol sequence using simple (alpha)-oxyaldehydes. While...

...might generate a hexose-oxocarbenium intermediate 6 that would rapidly undergo cyclization to form the carbohydrate ring system (Fig. 1B). This tandem aldol addition and cyclization presents two selectivity issues: (i...

...in the carbon-carbon bond--forming step, which ultimately defines the extent to which one carbohydrate isomer is generated in preference to another (e.g., allose versus altrose versus glucose versus...

...and 7 to Ti(Cl.sub.4) leads to the selective formation of the allose carbohydrate isomer in >19:1 selectivity, 97% yield, and 95% ee. In this latter case, we...

...in a cyclic (closed) transition state with the Felkin diastereoface of the aldehyde, whereas the magnesium reactions involve addition of the enolsilane to the opposite (non-Felkin) aldehyde face. We note...

...selective). Such hexose systems have established utility as either (alpha)- or (beta)-coupling partners in polysaccharide synthesis (1, 2). The modular nature of the Aldol Step 1 also allows for broad diversification of substituents at the carbohydrate C(4) and C(6) positions (10, 16). For example, the incorporation of TIPS-protecting...

...thereby affording carbohydrates that are differentially protected at each hydroxyl site. As such, these versatile saccharide monomers can be rapidly manipulated to expose the C(2), C(3), C(4), or C(6) hydroxyl Page 99

groups, an important consideration for di- or polysaccharide

couplings.

The reaction sequence also allows rapid access to a wide variety of unnatural carbohydrates...

...71% yield and >19:1 mannose selectivity. Carbogenic substituents can also be introduced at the saccharide C(4) position in the case where (alkyl)-alkyl and (alpha)-oxy aldehydes were cross...

...will enable medicinal chemists to rapidly study structure activity

relationships (SAR) on mono-, di-, and polysaccharide templates.

Our strategy for the synthesis of differentially protected bexoses thus provides rapid enantioselective access to key building blocks in saccharide and polysaccharide synthesis. Furthermore, our approach efficiently yields isotopic and functional variants of the hexoses that have...

32/3,K/62 (Item 6 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. Supplier Number: 07616215 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01186739 You can lower your cholesterol!

Gordon, G.F.; Underwood, D.L. Total Health , v11 , n3 , p33(3) June , 1989

Publication Format: Magazine/Journal

ISSN: 0274-6743 Language: English

Record Type: Fulltext Target Audience: Consumer

Word Count: 2297 Line Count: 00199

...artery walls. The LDL cholesterol is in a dangerous state, i.e., it has become oxidized or "rancid" and cannot be used productively, but instead can clog our arteries.

The National...

...reverse hardening of the arteries as well as lower cholesterol. We also use a unique polysaccharide, derived from seaweed sources, in a special nutritional product. we have learned to put our...

...cigarettes; cutting down excess alcohol consumption; avoiding excess weight; and getting proper dietary supplements, including magnesium, vitamin C, the correct oils, lots of fiber, etc.

In fact, recent evidence shows that...acids, which come from the liver, which is recycling and helping to break down the oxidized cholesterol. This process is similar to the disposal of our red blood cells after 120...

32/3,K/63 (Item 7 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. Supplier Number: 05272820 (USE FORMAT 7 OR 9 FOR FULL TEXT) Biomaterial-centered infection: microbial adhesion versus tissue integration.

Gristina, Anthony G. Science , v237 , p1588(8) Sept 25 ,

1987

Publication Format: Magazine/Journal

ISSN: 0036-8075 Language: English

Record Type: Fulltext Target Audience: Academic Word Count: 6027 Line Count: 00660

...and biological factors then allows bacterial attachment and adhesion. Proteinaceous adhesins (fimbriae in Gramnegative bacteria) polysaccharide polymers, and surface and milieu substances interact and intermix to form an aggregate of bacteria...be regarded as a poor prognostic sign for revision surgery (27). Extracellular Polymers

The extracellular polysaccharide substance of slime-producing bacteria is a loose amorphous material composed of a range of...

..stages of surface adhesion, aggregation, and polymicrobial interaction (2, 5, 29).

Currently, only the monomeric carbohydrate moieties and several amino acids in the exopolysaccharide slime of Staphylococcus epidermidis have been described...

...of mannose (7). These and other constituents of the slime vary between and within species. Polysaccharide composition and therefore aggregation or dispersion of bacteria may vary with nutritional and antagonist qualities...

...processes that in part depend on specific protein adhesin-receptor interactions, as well as on carbohydrate polymer synthesis (15, 22, 29, 37).

The delineation of complex natural processes into discrete categories

...and by ionic and glycoproteinaceous constituents from the host environment. The atomic structure, electronic state, oxidation layer, contamination level, and glycoprotein-coating sequence or dynamics in a human host have not...as hemodynamic or mechanical shear forces (hemodynamic, ocular, or total joint systems). Changes in extracellular polysaccharide polymer production and composition may play an important role in detachment or disaggregation (31, 44...to 14% (63).

Endothelial cells are surrounded by a well-developed glycocalyx. When

this outer polysaccharide margin is traumatized by viruses, toxins, or inflammation, receptor sites and fibronectin may be exposed...

...or amorphous bulk state (10, 38, 51, 53). Properties such as surface segregation and surface oxidation can be understood by considering the thermodynamic driving forces and kinetic limitations of the system...or as contaminants, may explain the acceleration of bacterial metabolic processes that result in growth, polysaccharide production, and colony and biofilm formation on specific substrata after they are contaminated by bacteria...

...phase changes in some bacteria and possibly in eukaryocytes (6, 50, 52, 53). For metals, cations (Fe3 , Mg2 , Cu2 , Mn2 , Zn2 , K , and Ni2) released or accumulated at the surface and...

32/3,K/64 (Item 8 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. 01057468 Supplier Number: 02665462 (USE FORMAT 7 OR 9 FOR FULL TEXT) Gordon Research Conferences. (includes schedules) (calendar) Page 101

Science , v219 , p1095(35)

March 4,

1983

Document Type: calendar ISSN: 0036-8075 Publication Format: Magazine/Journal

Language: English

Record Type: Fulltext Target Audience: Academic

Word Count: 26464 Line Count: 03173

...immunoglobulins.'

28 June. (P. A. Sandford, discussion leader): D. A. Brant, "Realistic molecular modeling of polysaccharide solution conformation'; G. O. Aspinall, "Selective fragmentations of polysaccharides.' (D. H. Ball, discussión leader): K...

...transport of lysosomal enzymes.'

1 July. (L. Anderson, discussion leader): Y. Ishido, "Novel aspects in carbohydrate chemistry: Regioselective protection and glycosylation reactions'; P. Sinay, "The chemical synthesis of heparin oligosaccharide fragments...Graham, "Oxygen diffusion studies in growing

films using the 180 isotope and sims.'

26 July. Oxidation of alloys: G. Yurek, "Oxidation of rapidly solidified alloys'; M. Bennet, "Effects of ion implantation on oxidation of alloys.' Growth of alumina scales: D. J. Field, "Mechanisms of oxidation of aluminum and aluminum alloys'; R. A. Ramanarayanan, "Al203-scales on Fe-base ODS alloys...mediated

6 July. C. Thorpe, "Flavoproteins in fatty acid oxidation:

8 July. C. Thorpe, "Flavoproteins in fatty acid oxidation:

8 Recent developments': 1 Knowles "Problems in the Shikimate pathway':

Recent developments'; J. Knowles, "Problems in the Shikimate pathway'; S. Benkovic. (C. Walsh, session chairperson...A. Porter, discussion leader): E. G. Janzen, "Applications of spin trapping in micelles!; T. Mill, " Oxidation chemistry of vitamin E and other phenols in bilayers and solution.' J. M. McBride, "Single...

...in free radical and carbene chemistry'; J. J. Kurland, "A kinetic-mechanistic model of butane oxidation.'

Fuel Science New Hampton School

Leon M. Stock, chairperson; Randall E. Winans, vice chairperson.

4...function in the N-linked oligosaccharides'; I. A. Wilson, "The structure and role of the carbohydrate moieties of influenza virus hemagglutinin'; Hans Vliegenthart, "High resolution proton NMR studies on the Oglycosidic carbohydrate chains of glycoproteins.' Metabolic control of dolichol pyrophosphate oligosaccharide synthesis and factors controlling distribution of...H. Bock, "Optimization of (heterogeneously catalyzed) gas reactions using photoelectron spectroscopy': C. A. Tolman catalyzed) gas reactions using photoelectron spectroscopy; C. A. Tolman, "Hydrocarbon oxidation by transition metal complexes; T. J. Collins, "Perspectives in the development of selective oxidizing , A. Sen, "Role of transition metal alkyls and acyls in the agents; A. Sen, Role of transition metal alkyls and acyls in the catalytic carbonylation of...L. Liebert, "Ferronematics--stable suspensions of magnetic grains in a nematic phase'; G. A. Jeffrey, "Carbohydrate liquid crystals.' R. Oldenbouig, "Light scattering studies of the liquid crystalline phase in virus solutions...biosynthesis.' Function of membrane lipids and proteins in cellular development: Ronald Schnaar, "Immobilized glycolipids support carbohydrate-specific cell adhesion'; William Lennarz, "Glycoprotein synthesis and embryonic development'; Lucy Shapiro, "Role of membrane...A. Paul Schaap, discussion leader): Donald R. Arnold, "Radical ions in photochemistry': Anthony Ledwith "Radical cations" "Radical ions in photochemistry"; Anthony Ledwith, "Radical cations in photochemically induced polymerization and cyclodimerization.' (Jack Saltiel, discussion leader): Marye Anne Fox, "Mechanistic aspects...

...Ulf Dolling, "A diflunisal process via palladium catalyzed aryl Page 102

coupling'; B. Bogdanovic, "Catalytic activation of magnesium and lithium, applications in organic synthesis and hydrogen storage'; Edward M. Kosower, "Synthesis and properties...Yoon, "Nematic order of semiflexible polymers.' Natural polymers (F. E. Bailey, session chairperson): R. Marchessault, "Carbohydrate polymers: Nature's high performance materials.'

8 July. Polymer degradation (H. J. Langer, session chairperson...

...and function I (John Rupley, session chairperson): John Moult, "Water around proteins'; Don Wiley, "Bound carbohydrate'; Gerard de Hass, "Lipid interactions.' The protein surface and function II (Joseph Kraut, session chairperson...applications of RO technology (J. K. Beasley, discussion leader): E. Klein, "Membranes for protein and carbohydrate separations: Theory and problems'; E. F. Casassa, "Statistics of confined polymer chains'; P. Blias, "From...

>>>W: KWIC option is not available in file(s): 399
32/3,K/65 (Item 9 from file: 149) Links
TGG Health&Wellness DB(SM)
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01056988 Supplier Number: 02916821 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Current status of asymmetric synthesis.

Morrison, James D.; Mosher, Harry S. Science , v221 , p1013(7) Sept 9 , 1983

Publication Format: Magazine/Journal

ISSN: 0036-8075 Language: English

Record Type: Fulltext Target Audience: Academic

Word Count: 4538 Line Count: 00466

...reasons. Mixed configurations are formed at the adjacent secondary carbinol center of the product; however, oxidation in the next step to 24 destroys the chirality at this center. Because the chelation of magnesium is much greater to oxygen than to sulfur, as shown in 25, the R group...

...be reversed, either enantiomer may be synthesized at will. The hydroxy aldehyde can either be oxidized to the corresponding chiral acid or reduced to the corresponding chiral glycol. Since there is...was passed over a selected strain of Eschericha coli cells that were immobilized in a polysaccharide gel (56). The potential use of immobilized enzymes and immobilized

Formula: whole cells for production...

32/3,K/66 (Item 1 from file: 444) Links
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New England Journal of Med.
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00106480
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Recent Developments In The Understanding Of The Pathogenesis And Treatment Of Anaerobic Infections (first of Two Parts) (Medical Progress)

Styrt, Barbara; Gorbach, Sherwood L.

The New England Journal of Medicine Jul 27 , 1989 ; 321 (4),pp 240-246 Line Count: 00371 Word Cou

Word Count: 05126

32/3,K/67 (Item 1 from file: 2) Links

...host cells as the first step in invasion (Ref. 25,26). The formation of a polysaccharide capsule may be a virulence factor in bacteroides (Ref. 27-32) and gram-positive anaerobes...with aerobes and anaerobes may help perpetuate the combination (Ref. 78). The lowering of the oxidation-reduction potential of the microenvironment by facultative organisms creates more favorable conditions for the growth...

Cited References ...to bovine ruminal cells. J Med Microbiol 1987; 23:69-73. 27. Kasper DL. The polysaccharide capsule of Bacteroides fragilis subspecies fragilis: immunochemical and morphologic definition. J Infect Dis 1976; 133:79-87. 28. Onderdonk AB, Kasper DL, Cisneros RL, Bartlett JG. The capsular polysaccharide of Bacteroides fragilis as a virulence factor: comparison of the pathogenic potential of encapsulated and.....DL, Lonngren J. Virulence factors in infections with bacteroides fragilis: isolation and characterization of capsular polysaccharide and lipopolysaccharide. Scand J Infect Dis Suppl] 1982; 35:45-52. 32. Brook I, Walker...S34-S39. 44. Hawley CE, Falkler WA Jr. The effect of divalent cation chelators and magnesium on activation of the alternative complement pathway by Fusobacterium polymorphum (nucleatum). J Periodont Res 1979...

Fulltext available through: USPTO Full Text Retrieval Options (c) 2007 Institution of Electrical Engineers. All rights reserved. 10510914 Title: Voltammetric characterization on the hydrophobic interaction in polysaccharide hydrogels Author Yimei Yin; Hongbin Zhang; Nishinari, K. Author Affiliation: Dept. of Polymer Sci. & Eng., Shanghai Jiao Tong Univ., China Journal: Journal of Physical Chemistry B vol.111, no.7 p. 1590-6 Publisher: ACS Publication Date: 22 Feb. 2007 Country of Publication: USA CODEN: JPCBFK ISSN: 1089-5647 SICI: 1089-5647(20070222)111:7L.1590:VCHI;1-0 Material Identity Number: G111-2007-011 Item Identifier (DOI): 10.1021/jp0660334 Language: English Subfile: A E Copyright 2007, The Institution of Engineering and Technology Title: Voltammetric characterization on the hydrophobic interaction in polysaccharide hydrogels Abstract: Cyclic voltammetric (CV) investigations on the properties of microdomains in polysaccharide hydrogels, methyl cellulose (MC) and k-carrageenan (CAR), coated on glassy carbon electrodes were reported.....blue (MB), tris(1,10-phenanthroline)cobalt(III) (Co(phen)/sub 3//sup 3+/2+/) cations, and ferricyanide/ferrocyanide (Fe(CN)/sub 6//sup 3-/4-/) anions were used as electroactive probes. Information on the patterns and strength of intermolecular interactions in these polysaccharide hydrogels can be inferred from the net shift of normal for reduced and potentials (E.....p/), the ratio of binding constants (K/sub red//K/sub ox/) for reduced and oxidized forms of bound species, and the apparent diffusion coefficients (D/sub app/) of probe in....method is of significant benefit to the understanding of the gelation driving forces in the polysaccharide hydrogels at a molecular level. Descriptors: ...óxidation; Identifiers: ...polysaccharide hydrogels... ...tris(1,10-phenanthroline)cobalt cations;

Page 104

32/3,K/68 (Item 2 from file: 2) Links Fulltext available through: ScienceDirect (c) 2007 Institution of Electrical Engineers. All rights reserved. 0000249793 INSPEC Abstract Number: 1935A00545 Title: General discussion on colloidal electrolytes p. 1-422 Journal: Transactions of the Faraday Society Publication Date: Jan. 1935 Country of Publication: UK Language: English Subfile: A Copyright 2004, IEE
Abstract: ...a) by hydrolysis of SiCl SUB 4 followed by dialysis and electrodialysis, and (b) by oxidation of SiH SUB 4 by ozone. These sols have only the electrical conductivity of pure.....distribution corresponding to the Donnan membrane equilibrium for sodium and calcium chlorides but not for magnesium sulphate. E. B. R. Prideaux (pp. 349-354). - Diffusion potentials and mobilities of ionised gelatin.....owes its electric charge mainly to phosphoric acid which is present as ester of the polysaccharide. The size of the starch ion, from osmosis, is about 200,000. A. Lottermoser (pp... 32/3,K/69 (Item 1 from file: 302) Links INDEX CHEMICUS (c) 2007 The Thomson Corporation. All rights reserved. 0000074040 Synthesis of a trisaccharide fragment corresponding to the lipopolysaccharide region of vibrio-parahaemolyticus. Author(s): VANSTRATEN NCR; KRIEK NMAJ; TIMMERS CM; WIGCHERT SCM; VANDERMAREL GA; VANBOOM JH (VANBOOM JH - reprint author)
Corporate Source: LEIDEN UNIV, LEIDEN INST CHEM, GORLAEUS LABS, POB 9502, NL-2300 RA LEIDEN, NETHERLANDS NL-2300 RA BC; LEIDEN UNIV, LEIDEN INST CHEM, GORLAEUS LABS, NL-2300 RA LEIDEN, NETHERLANDS NL-2300 RA BC; Journal Namé: JOURNAL OF CARBOHYDRATE CHEMISTRY 16 (6): 947-966 Publisher: MARCEL DEKKER INC, 270 MADISON AVE, NEW YORK, NY 10016 Language: ENGLISH No. of Compounds: 30 Synthesis of a trisaccharide fragment corresponding to the lipopolysaccharide region of vibrio-parahaemolyticus. ...Abstract: glycero-alpha-D-manno-heptopyranoside (22), obtained after hydroxymethylation of aldehyde 17 with (phenyldimethylsilyl)methyl magnesium chloride, followed by protective group manipulations, gave alpha-linked dimer 23. Oxidative removal of the... ...group manipulations (--> 26), and condensation with ethyl 1-thio-beta-D-glucopyranosyl donor 27 furnished trisaccharide 28. Oxidation of the C-6 in 29 and hydrogenolysis yielded target trisaccharide 2, a fragment of the inner-core lipopolysaccharide region of Vibrio parahaemolyticus, serotype 02. Descriptors: Keywords Plus: INNER-CORE REGION; D-MANNO-HEPTOSE: NEISSERIA-MENINGITIDIS; PHENYLDIMETHYLSILYL GROUP; GLUCURONIC-ACID; LD-HEPP; DERIVATIVES; OXIDATION; DISACCHARIDE 32/3,K/70 (Item 1 from file: 354) Links Page 105

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742753 EnCompassLit Document No.: 200415564
Chemical basis for a selectivity threshold to the oxygen delignification of kraft
softwood fiber as supported by the use of chemical selectivity agents
Author: Fu S.; Chai X.; Hou Q.; Lucia L.A.
Corporate Source: Inst. of Paper Sci. and Technology, Georgia Institute of
Technology
Source: Industrial and Engineering Chemistry Research 43/10 2291-2295 (ISSN
0888--5885) (20040512)
Language: English
ISSN: 0888--5885
CODEN: IECRE
Journal Name: Industrial and Engineering Chemistry Research
Document Type: JOURNAL ARTICLE
Publication Date: 040512
Abstract:
...that for low K number pulps, due to the greater proportion of lignin units to oxidize. ... the carboxyl group content in pulp was a satisfactory parameter to demonstrate the degree of oxidation incurred by the pulp
Assigned Terms: ...ELEMENT; ETHER; FIBER; KETONE; LIGNIN; MAGNESIUM SULFATE; MONOHYDROXY; MULTIOLEFINIC; OXIDATION REACTION; OXYGEN; PHENOL; SATURATED CHAIN;
SELECTIVITY...
Index Terms: ...BASIC; BENZENE RING; C6; C7; CARBOHYDRATE; CELLULOSE; DECOMPOSITION;
ELEMENT; ETHER; FIBER... ...GROUP IIA; GROUP VIA; KETONE; LIGNIN; MAGNESIUM;
MAGNESIUM SULFATE; MONOHYDROXY; MULTIOLEFINIC; NATURAL RÉSIN; OXÍDATION REACTION;
OXYGEN; PHENOL; PHYSICAL PROPERTY; POLYSACCHARIDE; SATURATED CHAIN; SELECTIVITY;
SINGLE STRUCTURE TYPE: SLURRY
 32/3,K/71 (Item 2 from file: 354) Links
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678369 EnCompassLit Document No.: 200117449
Toward the characterization of microporosity of carbonaceous films
Author: Terzyk A.P.; Gauden P.A.; Zawadzki J.; Rychlicki G.; Wisniewski M.;
Kowalczyk P.
Corporate Source: Department of Chemistry, Physicochem. Carbon Mat. Res. Grp., N.
Copernicus University; Department of Respiratory Protection, Military Inst. of
Chem./Radiometry
Source: Journal of Colloid and Interface Science 243/1 183-192 (ISSN 0021--9797)
(20011101)
Language: English ISSN: 0021--9797
CODEN: JCISA
Journal Name: Journal of Colloid and Interface Science
Document Type: JOURNAL ARTICLE
Publication Date: 011101
Abstract:
The porosity of microporous carbon films obtained from cellulose and were chemically
modified (oxidation and loading with metal cations , nine samples altogether) was
Assigned Terms: ...EQUATION; FILM; METAL; MICROPORE; NITROGEN; OXIDATION REACTION;
PROBABILITY; SPECIFIC SURFACE
Index Terms: ...BENZENE; BENZENE RING; C6; CALORIMETRY; CARBOHYDRATE; *CARBON;
CATION; CELLULOSE; *CHARACTERIZATION; CHART... ...MATHEMATICS; METAL; MICROPORE;
MICROSTRUCTURE; NÍTROGEN; OXIDATION REACTION; PHYSICAL PROPERTY; POLÝSACCHARIDE;
PORE SIZE; PROBABILITY; SINGLE STRUCTURE TYPE; SORPTION...
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                  Description
         Items
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              9
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         69635
                  S TRACHOMATIS
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                  RD (unique items)
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                  RD (unique items)
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                  S CATION OR CATIONS OR BIVALENT(W)CATIONS OR DIVALENT(W)CATION OR
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VALENT(W)CATIONS OR VALENT NEAR CATION OR MAGNESIUM(W)CATIONS OR CATION(W)MG
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                  RD (unique items)
                  S S16 AND (CALICIUM OR MAGNESIUM OR CATIONS OR BIVALENT(W)CATIONS)
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                  S S18 AND AGENT
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Duplicate detection is not supported for File 391.
Records from unsupported files will be retained in the RD set.
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                  RD (UNIQUE ITEMS)
S34
? t s34/3, k/1-39
>>>W: KWIC option is not available in file(s): 399
 34/3,K/1 (Item 1 from file: 5) Links
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            Biosis No.: 198172043946
06309995
PEROXIDASE ANTI MICROBIAL SYSTEM OF HUMAN SALIVA REQUIREMENTS FOR ACCUMULATION OF
HYPO THIO CYANITE
Author: THOMAS E L (Reprint); BATES K P; JEFFERSON M M
Author Address: DEP OF BIOCHEM, ST JUDE CHILDREN'S RES HOSP, 332 NORTH LAUDERDALE, MEMPHIS, TENNESSEE 38101, USA**USA Journal: Journal of Dental Research 60 (4): p 785-796 1981
                                            Page 107
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ISSN: 0022-0345

Document Type: Article Record Type: Abstract Language: ENGLISH

Abstract: ...saliva was fractionated to determine the components required for production and accumulation of the antimicrobial oxidizing agent, hypothiocyanite ion (OSCN-). The required components were: peroxidase activity and thiocyanate ion (SCN-), the saliva sediment, which produced hydrogen peroxide (H2O2) in the presence of O2 and a divalent cation and heat-stable factors of the saliva supernatant. The supernatant factors were separated into high- and low-MW fractions. The high-MW fraction contained peptide and carbohydrate and its activity was partially inhibited by proteolytic treatment. The low MW fraction contained carbohydrate and could be replaced by a number of mono- and disaccharides. Glucosamine and N-acetyl...
...greater in the presence of glucosamine. Peroxidase-mediated antimicrobial activity is apparently modulated by the carbohydrate composition of whole saliva and by certain protein and glycoprotein components. Descriptors: HYDROGEN PER OXIDE OXYGEN PEPTIDE CARBOHYDRATE

34/3,K/2 (Item 1 from file: 34) Links
Fulltext available through: USPTO Full Text Retrieval Options
SciSearch(R) Cited Ref Sci (c) 2007 The Thomson Corp. All rights reserved. Genuine Article#: KF557 02159011 No. References: 34 ON THE NATURE OF A NEW ENERGY-STORING COMPOUND FORMED IN BACTERIA IN RESPONSE TO OXIDATIVE STRESS

Author: SHCHIPANOVA IN; KHARATYAN EF; SIBELDINA LA; OGREL OD; OSTROVSKII DN Corporate Source: AN BAKH INST BIOCHEM, INST CHEM PHYS/MOSCOW//RUSSIA/ Journal: BIOCHEMISTRY-USSR , 1992 , V 57 , N6 (JUN) , P 586-594 ISSN: 0006-2979 Language: ENGLISH Document Type: ARTICLE (Abstract Available) Abstract: ...8 ppm. The compound, which is readily extractable with 50% ethanol, was not adsorbed to cation-exchanging resins. It was purified by three adsorption-elution cycles on Donwex 1x4 anion exchanger.....cytoplasm of the bacteria (up to 3-30 mm) is either a diglycosylpyrophosphate or a carbohydrate cyclopyrophosphate. We suggest that the compound may be a normal alternative metabolite in the main... ...phosphate. The accumulation of the compound may result from an increase in the concentration of oxidized NADP, which controls the majority of reduction processes within the cells. It is tempting to...

34/3,K/3 (Item 2 from file: 34) Links Fulltext available through: ScienceDirect SciSearch(R) Cited Ref Sci (c) 2007 The Thomson Corp. All rights reserved. Genuine Article#: EP910 00718920 No. References: 1165 ORGANIC-SYNTHESIS - WHERE NOW

Author: SEEBACH D

Corporate Source: SWISS FED INST TECHNOL, ORGAN CHEM LAB, UNIV STR 16/CH-8092

ZURICH//SWITZERLAND/

Journal: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION IN ENGLISH , 1990 , V 29 , N11 , P 1320-1367

Language: ENGLISH Document Type: REVIEW (Abstract Available)

Research Fronts: ...007 (ORGANOCOPPER REAGENTS; HIGHER-ORDER CYANOCUPRATES; DOUBLE MICHAEL ADDITION; COPPER CHEMISTRY)

89-2743 007 (ASYMMETRIC OXIDATION; SHARPLESS KINETIC RESOLUTION; EPOXY ALCOHOLS;

BETA-KETO SULFOXIDES; TRANSITION-METAL COMPLEXES)
89-0036 006 (SPIN....HIGHLY DIASTEREOSELECTIVE SYNTHESIS)
89-4370 004 (MOLECULAR RECOGNITION; DITOPIC CYCLOPHANE HOSTS; INCLUSION COMPLEXES;
COMPLEXATION OF CATIONS; MACROCYCLIC RECEPTOR)

Page 108

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89-5195 004 (ASYMMETRIC DIELS-ALDER REACTIONS; CHIRAL AUXILIARIES; LEWIS
ACID-CATALYZED CYCLO....OF 5-MEMBERED LACTAMS: ACYCLIC N-ALLYTRICHLOROACETAMIDE
DERIVATIVES)
 89-3253 003 (CONVENIENT REAGENT FOR EFFICIENTLY OXIDIZING ORGANOBORANES; CHEMISTRY
OF SILYL THIOKETONES; VINYL SILANE PHOSPHATES; CHIRAL ORGANO-SILICON COMPOUNDS)
 89-7872 003 (TITANIUM- CARBOHYDRATE COMPLEXES; HIGHLY ENANTIOSELECTIVE ASYMMETRIC
REACTIONS OF CARBONYL-COMPOUNDS; ORGANOTITANIUM REAGENTS IN ORGANIC-SYNTHESIS)
 89-0193......CHEMISTRY OF POLYNUCLEAR METAL-COMPLEXES; CARBONYL CLUSTERS; X-RAY
CRYSTAL-STRUCTURE)
 89-6927 002 (IMMUNOSUPPRESSIVE AGENT, FK-506; OPTIMAL SERUM TROUGH LEVELS OF FK506;
CYCLOSPORINE IN CANINE ORTHOTOPIC HEPATIC ALLOGRAFT SURVIVAL.....SUBSTITUENTS;
INDIGOID DERIVATIVES; STABILIZATION ENERGY; N-ACYL DEHYDROALANINES)
89-1678 001 (CONDUCTING POLYMER PRECURSOR; ELECTROCHEMICAL OXIDATION; DIVALENT
DOPANT IONS; COPPER(I) CHLORIDE)
89-1750 001 (SOLID-PHASE PEPTIDE-SYNTHESIS; [8-ARGININE....SYNTHESIS; PROTECTION
OF THE CARBONYL GROUP; SELECTIVE GENERATION)
 89-5422 001 (ORGANO-SILICON CHEMISTRY; TITANIUM-CARBOHYDRATE COMPLEXES;
POLYMERIZATION OF TRIMETHYLSILYL ACETYLENE)
 89-5424 001 (STEREOSELECTIVE CONVERSION; EFFICIENT OXIDATIVE CLEAVAGE OF CARBON ...
 34/3,K/4 (Item 1 from file: 45) Links
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EMCare
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00592479
               EMCare No: 29144071
  Action of agents on glucosyltransferases from Streptococcus mutans in solution and
adsorbed to experimental pellicle
  Wunder D.; Bowen W.H.
  D. Wunder, University of Rochester, Center for Oral Biology, Box 611, 601 Elmwood
Avenue, Rochester, NY 14642 United States
  Archives of Oral Biology ( ARCH. ORAL BIOL. ) ( United Kingdom )
                                                                                   1999 , 44/3
(203 - 214)
                    ISSN: 0003-9969
  CODEN: AOBIA
 PUBLISHER ITEM IDENTIFIER: S0003996998001290 DOCUMENT TYPE: Journal; Article
                        SUMMARY LANGUAGE: ENGLISH
  LANGUAGE: ENGLISH
 NUMBER OF REFERENCES: 54
 RECORD TYPE: Abstract
  Copyright 2006 Elsevier B.V., All rights reserved.
  ...Gtf adsorbed to parotid saliva-coated and hydroxylapatite (surface phase).
Reagents tested included the metallic cations LiSUP+, ZnSUP2+, CuSUP2+, FeSUP2+ and FeSUP3+ the oxidizing compounds hypochlorite, Rose Bengal, perborate, and sodium-meta-periodate; and a panel of sugars and.....50-80%). However, surface-adsorbed Gtfs displayed increased resistance to inhibition by the same metal
cations and oxidizing compounds that inhibited them in solution. In contrast, both TGS and dNJ possessed similar inhibition...
DESCRIPTORS:
...metal ion; xylitol; sorbitol; sucrose; periodate sodium; 1 deoxynojirimycin;
metal; enzyme inhibitor; ferric ion; monovalent cation; oxidizing agent; sweetening
agent; unclassified drug; zinc ion; zinc; DNA; carbohydrate derivative; bacterial
DNA; carbohydrate; periodate; sodium; cation; exopolysaccharide; bacterial protein; copper ion; copper; drug derivative; lithium ion; ferrous ion; saliva; synthesis;
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34/3, K/5 (Item 2 from file: 45) Links Fulltext available through: USPTO Full Text Retrieval Options (c) 2007 Elsevier B.V. All rights reserved. Page 109

EMCare No: 25351101 00109511

Characterization of the hemagglutinin of Staphylococcus epidermidis

Rupp M.E.; Sloot N.; Meyer H.-G.W.; Han J.; Gatermann S.

Dr. M.E. Rupp, 600 S. 42nd St., Omaha, NE 68198-5400 United States Journal of Infectious Diseases (J. INFECT. DIS.) (United States)

1995 .

172/6 (1509-1518)

ISSN: 0022-1899 CODEN: JIDIA DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 50

RECORD TYPE: Abstract
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...hydrophobicity (P = .906). Hemagglutination inhibition studies revealed that ...nyarophobicity (P = .906). Hemaggiutination inhibition studies revealed that hemaggiutination was not affected by heat, pH, cation concentration, proteolytic enzymes, biologic detergent, serum proteins, or subinhibitory antibiotics. Hemaggiutination was abolished by periodate oxidation and digestion with glycosidases. It was markedly inhibited by beta-lactose and its monosaccharide constituents....pentose, ketose, hexosamine, uronic acid, and phosphate. Hemaggiutinin of S. epidermidis appears to be a polysaccharide distinct from other known adhesins of S. epidermidis. **DESCRIPTORS:**

glucose; proteinase; lactose; paracetamol; hexosamine; adhesin; acetylsalicylic acid; phosphate; bacterial polysaccharide; ibuprofen; salicylic acid; polysaccharide; nonsteroid antiinflammatory agent; periodate; biomaterial; antibiotic agent; cation; detergent; plasma protein; uronic acid; monosaccharide; protein; carbohydrate; pentose; ketose; hemagglutination; biofilm; hydrophobicity; human cell; human tissue; chemical composition; concentration response; strain difference....priority journal; prosthesis failure; chemical analysis; pathogenesis; prosthesis infection; cell surface; hemagglutination inhibition; heat; pH; oxidation; digestion

34/3,K/6 (Item 1 from file: 50) Links Fulltext available through: USPTO Full Text Retrieval Options CAB Abstracts (c) 2007 CAB International. All rights reserved. 0004097901 CAB Accession Number: 19721901246

Effect of aeration on the evolution of organic matter and structural stability in a silty soil amended with 14C-clover.

Traore, B.; Breisch, H.; Guckert, A.; Jacquin, F. Bulletin de l'Ecole Nationale Superieure d'Agronomie et des Industries Alimentaires vol. 14 (1): p.75-86 Publication Year: 1972 ISSN: 0374-6003

Language: French Record Type: Abstract

Document Type: Journal article ... Under aerobic conditions, rapid decomposition of the added organic matter gave rise by biosynthesis to polysaccharide-type compounds which became preferentially incorporated into microbial humin and played an important part in... the reduction of Fe causing a marked increase in structural stability after drying and re-oxidation. As the reduced Fe was reconverted to the ferric form it acted both as a cementing agent and as a binding cation.[134:16.07:116.72.01].

34/3,K/7 (Item 1 from file: 73) Links USPTO Full Text Retrieval Options Fulltext available through: **EMBASE** (c) 2007 Elsevier B.V. All rights reserved. EMBASE No: 2003047648

Chemical modification of glycyrrhizic acid as a route to new bioactive compounds for medicine

Baltina L.A.

L.A. Baltina, Institute of Organic Chemistry, Ufa Research Center of RAS, 71 Prospect Oktyabrya, Ufa 450054 Russian Federation

Author Email: baltina@anrb.ru

Current Medicinal Chemistry (CURR. MED. CHEM.) (Netherlands) 2003 , 10/2

(155-171)

CODEN: CMCHE ISSN: 0929-8673 Document Type: Journal; Review

Language: ÉNGLISH Summai Number Of References: 120 Summary Language: ENGLISH

...desoxy-glycosides, modified analogs of GL, was carried out by the oxidative splitting of the carbohydrate part of GL with NaIOSUB4. Triterpene 2-desoxy--D-glycosides, analogs of GL, were prepared by the glycal method in the presence of iodine-containing promoters or sulfonic acid cation-exchange resin KU-2-8 (H+) and LiBr. New anti-inflammatory and anti-ulcer agents... ...vitro. Preparation niglizin (penta-O-nicotinate of GL) was studied clinically as an anti-inflammatory agent and is of interest for studies as hepatoprotector and HIV inhibitor.

DRUG DESCRIPTORS: ...extract--drug therapy--dt; Glycyrrhiza extract--pharmacology--pd; Glycyrrhiza extract--intravenous drug administration--iv; antiinflammatory agent--drug analysis--an; antiinflammatory agent--drug development--dv; antiinflammatory agent--drug therapy--dt; antiinflammatory agent--pharmacology--pd; antiinflammatory agent--intravenous drug administration--iv; antiulcer agent --drug analysis--an; antiulcer agent--drug development--dv; antiulcer agent--drug therapy--dt; antiulcer agent -- pharmacology--pd; antiulcer agent--intravenous drug administration --iv; agent --pharmacorogy--pd; antiviter agent--intravenous drug administration --iv; antiallergic agent--drug analysis--an; antiallergic agent--drug development--dv; antiallergic agent--intravenous drug administration--iv; antidote--drug analysis --an; antidote--drug development--dv; antidote--drug therapy.....development--dv; antioxidant--drug therapy--dt; antioxidant --pharmacology--pd; antioxidant--intravenous drug administration--iv; antineoplastic agent--drug analysis--an; antipopolastic agent--drug development--dv; antipopolastic analysis--an; antineoplastic agent --drug development--dv; antineoplastic agent--drug therapy--dt; antineoplastic agent--pharmacology--pd; antineoplastic agent --intravenous drug administration--iv; antivirus agent--drug analysis--an; antivirus agent--drug development--dv; antivirus agent--drug therapy--dt; antivirus agent--pharmacology--pd; antivirus agent--intravenous drug administration--iv; ammonium derivative--drug therapy--dt; ammonium derivative--pharmacology--pd;

carboxyl group...
MEDICAL DESCRIPTORS: ...hepatitis--drug therapy--dt; Human immunodeficiency virus infection --drug therapy--dt; drug synthesis; chemical reaction; oxidation; separation technique; cation exchange; drug potency; in vitro study; structure activity relation; human; nonhuman: review

34/3,K/8 (Item 1 from file: 155) Links

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Isolation and characterization of sulfhydryl oxidase from bovine milk.

Janolino V G; Swaisgood H E

Journal of biological chemistry (UNITED STATES) Apr 10 1975, 250 (7) p2532-8

Journal Code: 2985121R ISSN: 0021-9258--Print

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Document Type: Journal Article; Research Support, U.S. Gov't, Non-P.H.S.

Languages: ENGLISH

...sample weight, of which 89% could be attributed to amino acid residues and 11% to carbohydrate residues. Five half-cystine residues per subunit were indicated by

Main Citation Owner: NLM

Record type: MEDLINE; Completed

cysteic acid analysis and by... ...tentatively suggests the presence of one disulfide bond. Sulfhydryl oxidase was found to catalyze the oxidation of sulfhydryl groups in both small compounds and proteins, using O2 as oxidant and producing...otherwise identical conditions, full recovery of RNase activity required 24 hours. The presence of reducing agent was not required for this activity, nor was prior reduction of the sulfhydryl oxidase. Based... ; Amino Acids--analysis--AN; Animals; Binding Sites; Cations, Divalent; Cattle; Electrophoresis, Polyacrylamide Gel; Fucose--analysis--AN; Galactosamine--analysis--AN; Glutathione; Hexoses--analysis--AN... Chemical Name: Amino Acids; Cations, Divalent; Hexoses; Sialic Acids; Fucose; Urea; Mercaptoethanol; Glutathione; Iron; Galactosamine; Oxidoreductases; Ribonucléases 34/3, K/9 (Item 1 from file: 156) Links Fulltext available through: ScienceDirect ToxFile (c) format only 2007 Dialog. All rights reserved. 1055717 NLM DOC NO: CRISP/98/EY00484-30 Sec. INTRAOCULAR TRANSPORT AND METABOLISM Sec. Source ID: CRISP/98/EY00484-30 REDDY VN OAKLAND UNIVERSITY, EYE RESEARCH INSTITUTE, ROCHESTER, MI 48309-4401 Source: Crisp Data Base National Institutes Of Health City or State: MICHIGAN Pub. Year: 1997 Sponsoring Agency: U.S. DEPT. OF HEALTH AND HUMAN SERVICES; PUBLIC HEALTH SERVICE; NATIONAL INST. OF HEALTH, NATIONAL EYE INSTITUTE Award Type: Grant Document type: Research Languages: ENGLISH Record type: Completed RPROJ The long range goal is to provide an understanding of the role of oxidation and transport mechanisms in human senile cataract. We have recently succeeded in growing human lens... ...of radiolabeled amino acids. Other specific aims include: the determination of glutathione, amino acid and cation compositions in HLE cells; a number of key enzymes of carbohydrate and glutathione metabolism and their role in defending the lens against oxidative damage; the relative....oxygen and other oxidants on these parameters. Since cells undergoing differentiation are more vulnerable to oxidation, efforts will be made to examine the steps of this differentiation process under normal conditions... Identifiers: ...inhibitor; intraocular fluid; lens; lens protein; cataract; gene expression; human tissue; immunochemistry; immunofluorescence technique; rubidium; oxidizing agent; aldehyde reductase; glutathione reductase; glutathione; catalase; glutathione peroxidase; hydrogen peroxide; adenosinetriphosphatase; chromatography; gel electrophoresis; protein...

34/3,K/10 (Item 1 from file: 399) Links Fulltext available through: USPTO Full Text Retrieval Options CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved.

CA: 140(6)77343f **JOURNAL** Oxidation and metal-ion affinities of a novel cyclic tetrasaccharide Author: Dunlap, Christopher A.; Cote, Gregory L.; Momany, Frank A. Location: Fermentation Biotechnology Research Unit, National Center for Agricultural Utilization Research, Agricultural Research Service, United States Department of Agriculture, Peoria, IL, 61604-3999, USA Journal: Carbohydr. Res.

Date: 2003 Volume: 338 Number: 22 Pages: 2367-2373 CODEN: CRBRAT ISSN: 0008-6215 Publisher Item Identifier: 0008-6215(03)00400-2 Language: English Publisher: Elsevier Ltd. 34/3,K/11 (Item 2 from file: 399) Links Fulltext available through: ScienceDirect CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. CA: 139(16)250284s PATENT Coupling low-molecular substances to a modified polysaccharide, especially lactonized and/or oxidized hydroxyethyl starch for the preparation of drug formulation Inventor (Author): Orlando, Michele: Hemberger, Juergen Location: Germany, Assignee: Biotechnologie - Gesellschaft Mittelhessen MbH Patent: PCT International; WO 200374088 A2 Date: 200309 Application: WO 2003EP2084 (20030228) *DE 10209822 (20020306) Date: 20030912 Pages: 34 pp. CODEN: PIXXD2 Language: German Patent Classifications: class: A61K-047/48A Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM Designated Regional: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG 34/3,K/12 (Item 3 from file: 399) Links Fulltext available through: ScienceDirect CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. CA: 139(14)219381x 139219381 **PATENT** Coupling proteins to a modified polysaccharide, especially oxidized hydroxyethyl starch for use as drugs Inventor (Author): Hemberger, Juergen; Orlando, Michele Location: Germany, Assignee: Biotechnologie - Gesellschaft Mittelhessen MbH Patent: PCT International; WO 200374087 A1 Date: 200309 Application: WO 2003EP2083 (20030228) *DE 10209821 (20020306) Date: 20030912 Pages: 38 pp. CODEN: PIXXD2 Language: German Patent Classifications: Class: A61K-047/48A; C08B-031/18B Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM Designated Regional: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; SE; SI; SK;

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search.txt
TR: BF: BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG
 34/3,K/13 (Item 4 from file: 399) Links
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(c) 2007 American Chemical Society. All rights reserved.
131303223 CA: 131(22)303223q PATENT Small particles having walls made of cross-linked proteins and polysaccharides and
bearing surficial hydroxam groups for chelating metal ions, methods for their production and applications in cosmetics, pharmaceuticals, and foodstuffs Inventor (Author): Perrier, Eric; Buffevant, Chantal; Bonnet, Isabelle; Levy,
Marie-Christine
Location: Fr
Assignee: Coletica
Patent: Germany Offen.; DE 19916896 A1
                                                       Date: 19991021
Application: DÉ 19916896 (19990414) *FR 984611 (19980414)
Pages: 28 pp.
CODEN: GWXXBX
Language: German
Patent Classifications:
Class: B01J-013/02A; A61K-009/50B; A61K-049/00B; A61K-051/12B; A23P-001/04B; C02E-001/58B; A61K-007/50B; C09K-015/04B
 34/3,K/14 (Item 5 from file: 399) Links
   Fulltext available through:
                                        ScienceDirect
CA SEARCH(R)
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                     CA: 123(10)118051d
Breaking of crosslinked polymer gels with persulfate and sequestering agent for
profile control in petroleum recovery
Inventor (Author): Harris, Phillip C.; Heath, Stanley J. Location: USA
Assignee: Halliburton Co.
Patent: United States; US 5393810 A
                                                   Date: 950228
Application: US 176165 (931230)
Pages: 5 pp.
CODEN: USXXAM
Language: English Patent Classifications:
             524056000; C08K-005/15A; C08K-003/38B; C08L-005/00B; E21B-043/26B
  class:
 34/3,K/15 (Item 1 from file: 357) Links
   Fulltext available through:
                                        ScienceDirect
Derwent Biotech Res.
(c) 2007 The Thomson Corp. All rights reserved.
0430818 DBA Accession No.: 2007-17125 PATENT
Producing interleukin (IL)-29 comprises culturing a prokaryotic host cell comprising a nucleic acid molecule encoding IL-29 in a growth medium recombinant cytokine
protein purification via bacterium culture using fermentor
Author: ZAMOST B L; LEE G F; DEDINSKY R M
Patent Assignee: ZYMOGENETICS INC
                                           2007
Patent Number: WO 200741713 Patent Date: 20070412 WPI Accession No.: 2007-476618
 (200746)
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Priority Application Number: US 723544 Application Date: 20051004 National Application Number: WO 2006US39139 Application Date: 20061004

Abstract: ...in a second growth medium at a pH of 6.2-7.2, where a carbohydrate feed Page 114

Language: English

solution is fed into the fermentation vessel at 6-8 hours elapsed fermentation time; (D) adding an inducing agent to the fermentation vessel at 20-30 hours elapsed fermentation time; and (E) harvesting the.....a purified monopegylated IL-29 polypeptide, produced by the methods above.BIOTECHNOLOGY - Preferred Method: The carbohydrate feed solution comprises a glycerol or glucose at 10-30 g/L growth medium, and....acids (SEQ ID NO: 4), or 176 amino acids (SEQ ID NO: 6). The inducing agent of step (d) is isopropyl thiogalactopyranoside, where isopropyl thiogalactopyranoside is added to the culture at....medium under conditions where the encoded IL-29 polypeptide is expressed; (B) adding an inducing agent to induce expression of the IL-29 polypeptide; (C) harvesting the prokaryotic host cells; (D.....polyethylene glycol, salt, 0.5-1.25 M arginine and a mixture of reduced and oxidized molecules for 1-26 hours at a temperature of 4-30degreesC and a pH 7.... a final concentration of 0.05-3.0 mg/ml. The mixture of reduced and oxidized molecules of the refolding buffer are selected from cysteine and cystine, ditlfiothreitol and cystine, reduced glutathione and oxidized glutathione, or dithiothreitol and oxidized glutathione. Purifying an IL-29 polypeptide comprises: (A) providing the IL-29 polypeptide according to......B) loading the filtered solution comprising refolded IL-29 polypeptide of step (a) onto a cation exchange chromatography column equilibrated with sodium acetate at pH 5.5; (C) eluting bound IL.....polypeptide eluate through a 0.45 microns filter. The IL-29 polypeptide elutes from the cation exchange chromatography column equilibrated with 50 mM sodium chloride after......further comprises (h) loading the IL-29 polypeptide of step (g) onto a high performance cation exchange chromatography column at about 0.4 M sodium chloride to 0.6 M sodium.....0.2 microns membrane; (H) loading the solution of step (g) onto a high performance cation exchange chromatography column equilibrated with 50 mM sodium acetate, 20

34/3,K/16 (Item 2 from file: 357) Links
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0408974 DBA Accession No.: 2006-22470 PATENT
System for pre-diagnosing or diagnosing diabetes in subject, comprises detection of marker such as transthyretin, apolipoprotein CII or CIII, and serum albumin for use in diabetes diagnosis in rat and human

Author: YOSHIKAWA T; NAITO Y; ARIKUNI H; AKAGIRI S; MIHARA K; OOKI T; YAMAGUCHI T; MAFUNE S; TAKAHASHI Y; NAKASHIMA Y; AOKI M; KOBAYASHI M; KIGAWA E Patent Assignee: YOSHIKAWA T; BIOMARKER SCI CO LTD 2006 Patent Number: WO 200673195 Patent Date: 20060713 WPI Accession No.: 2006-621405 (200664) Priority Application Number: JP 2005327243 Application Date: 20051111 National Application Number: WO 2006JP300115 Application Date: 20060106 Language: Japanese Abstract: ...substance, or a device or apparatus for selectively recognizing the marker substance, for manufacturing an agent for pre-diagnosing or diagnosing diabetes in a subject; (3) evaluating a substance for its.....its derivative, and serum albumin. The factor is chosen from nucleic acid molecule, polypeptide, lipid, carbohydrate, organic low molecule, and their composite molecules. The factor is preferably a protein or a.....transthyretin derivative is chosen from S-cysteinyl transthyretin, glutathionized transthyretin, disulfide (S-S) bonded transthyretin, oxidation transthyretin, formylated transthyretin, acetylated transthyretin, phosphorylated transthyretin, carbohydrate addition transthyretin, myristylized transthyretin, and their composite derivatives. The reduction in transthyretin level or the.....ID No. 10 and 12, in which the residue at position 94 and 95 comprises carbohydrate. The factor (antibody) is capable of differentiating apolipoprotein CIII and its derivative, and capability of....a reference value, where the marker Page 115

substance is a protein chosen from protein trapped in cation exchanger at pH 7.0 or less and having molecular weight of 13800, protein trapped....or less and having molecular weight of 9400, 9700 or 66000 and protein trapped in cation exchanger at pH 7.0 or less and having molecular weight of 9400, 9700 or... support. The marker substance is a protein chosen from protein capable of binding with weak cation exchanger at pH 4.0 and having a mass/electric charge ratio that produces an....an ion peak at 9060 in mass spectrometry, protein capable of binding with the weak cation exchanger at pH 4.0 and having a mass/electric charge ratio that produces an... ... 13700, 3560 or 4180 in mass spectrometry, and protein capable of binding with the weak cation exchanger at pH 4.0 and having a mass/electric charge ratio that produces an...

34/3,K/17 (Item 3 from file: 357) Links Fulltext available through: ScienceD ScienceDirect Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved. 0403048 DBA Accession No.: 2006-16544 PATENT New expression vector comprising prokaryotic origin of replication, transcriptional initiation DNA element, nucleotide sequence, and transcriptional terminator, useful for producing fibroblast growth factor 18 (FGF18) protein involving fibroblast growth factor gene expression in host cell for use in recombinant FGF18 protein preparation

Author: REARDON B J; JULIEN S D; CHAN C; LIU H Y Patent Assignee: ZYMOGENETICS INC 2006

Patent Number: WO 200663362 Patent Date: 20060615 WPI Accession No.: 2006-446097

(200645)Priority Application Number: US 635023 Application Date: 20041210 National Application Number: WO 2005US45166 Application Date: 20051212

Language: English Abstract: ...fed into the fermentation vessel before 15 hours elapsed fermentation time (EFT); adding an inducing agent to the fermentation vessel at 20-30 hours EFT; and harvesting the host cells at 48-56 hours EFT. The inducing agent is isopropyl B-D thiogalactopyranoside (IPTG) at 0.5 to 2 mM. The feed solution comprises a carbohydrate selected from glycerol and glucose at a concentration of growth medium, and a feed rate of 5-15 grams of carbohydrate per hour. The glycerol is 40-70 % v/v glycerol or the glucose is 40....by addition of a refolding buffer comprising the arginine salts and a mixture of reducing and oxidizing components; isolating the FGF18 or trFGF18 protein by removing unfolded and aggregated proteins by filtering; and purifying the FGF18 or trFGF18 refolded protein on a cation exchange column; where the isolated and purified FGF18 protein is capable of being biologically active....by addition of a refolding buffer comprising arginine salts and a mixture of reducing and oxidizing components; isolating the FGF18 or trFGF18 protein by removing unfolded and aggregated proteins by filtering; purifying the FGF18 or trFGF18 refolded protein on a cation exchange column; and purifying the FGF18 or trFGF18 eluate on a hydrophobic interaction column, where...

34/3,K/18 (Item 4 from file: 357) Links Fulltext available through: ScienceDirect Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved.
0345140 DBA Accession No.: 2004-17432 PATENT
New expression vectors for the large-scale production of IL-21 proteins comprises a prokaryotic origin of replication, a transcriptional initiation DNA element, a polynucleotide sequence and a transcriptional terminator plasmid-mediated gene transfer and expression in Escherichia coli for recombinant interleukin-21 production and purification

Author: CHANG C; ZAMOST B L; COVERT D C; LIU H Y; DE JONGH K S; MEYER J D; HOLDERMAN

2004 Patent Assignee: ZYMOGENETICS INC

Patent Number: WO 200455168 Patent Date: 20040701 WPI Accession No.: 2004-500211

(200447) Priority Application Number: US 433452 Application Date: 20021213

National Application Number: WO 2003US39764 Application Date: 20031212

Language: English

Abstract: ...fed into the fermentation vessel before 15 hours elapsed fermentation time (EFT); adding an inducing agent to the fermentation vessel at 20-30 hours EFT; and harvesting the host cells at 48-56 hours EFT. The inducing agent is isopropyl and harvesting the host cells at 48-56 hours EFT. The inducing agent is isopropyl thiogalactopyranoside (IPTG) at 0.5-2 mM. The feed solution comprises a carbohydrate selected from glycerol and glucose at a concentration of growth medium, and a feed rate of 5-15 grams of carbohydrate per hour. The glycerol is 40-70 (preferably 70 %) v/v glycerol or the glucose... ...by addition of a refolding buffer comprising arginine salts and a mixture of reducing and oxidizing components; isolating the IL-21 protein by removing unfolded and aggregated proteins by filtering; and purified IL-21 protein is capable of being biologically... ...by addition of a refolding buffer comprising arginine salts and a mixture of reducing and oxidizing components: isolating the IL-21 protein by removing unfolded and aggregated proteins components; isolating the IL-21 protein by removing unfolded and aggregated proteins by filtering; purifying the IL-21 refolded protein on a cation exchange column; and purifying the IL-21 eluate on a hydrophobic interaction column, where the... ...into refolding buffer comprising about 0.75 M arginine, 2 mM DTT/4 mM cysteine oxidation-reduction pair at least 20 times; adjusting pH to about 5.5 with 20 % acetic...

34/3,K/19 (Item 1 from file: 391) Links Beilstein Database - Reactions (c) 2007 Beilstein GmbH. All rights reserved. Reaction Id: 716389 Reactants BN=605842 1-phenyl-ethanone **Products** BN=1905149 1-phenyl-ethanol No. of Reaction Details: 382 No. of References: 359

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Tetrahydroborate (BTPPTB) as a Selective Reducing Agent for Reduction of Organic
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Trichlorosilane-Dimethylformamide (Cl3SiH-DMF) as an Efficient Reducing Agent. Reduction of Aldehydes and Imines and Reductive Amination of Aldehydes under Mild Conditions Using Hypervalent....M. MODIFIED BOROHYDRIDE AGENTS METHYLTRIPHENYLPHOSPHONIUM TETRAHYDROBORATE; MePh3P + BH4 - AS A SELECTIVE AND AN EFFICIENT REDUCING AGENT SYNCAV; Synth.Commun.; 26-13(1996)2429-2442; 92, 6010672 Doussot, Joeel....M. Mansour Poly- eta -(pyrazine)zinc Borohydride as a New Stable, Efficient and Selective Reducing Agent SYNCAV;

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(2,2'-Bipyridyl)(tetrahydroborato)zinc Complex, (Zn(BH4)2(bpy)), as a New, Stable, Efficient Ligand-Metal Hydroborate and Chemoselective Reducing Agent BCSJA8;
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359, 6354659 Thormeier, Sabine ...

34/3,K/20 (Item 2 from file: 391) Links Beilstein Database - Reactions (c) 2007 Beilstein GmbH. All rights reserved. Reaction Id: 218058 Reactants BN=1734497 oct-1-ene Products BN=79912 hexyloxirane

No. of Reaction Details: 195

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No. of References: 189
Reaction Details
   ...Reagent: aq. H2O2
  Catalyst: mesoporous titanium silicalite 1
  Solvent: methanol
  Temp: 40 C
  Reaction Type: Epoxidation (Ref. 35)
  Classification: Preparation
  Yield: 92 percent (BN=79912)
  Reagent: benzonitrile, H2O2, K2CO3....beta
-octabromoporphyrinato-manganese(III) chloride
  Solvent: CH2C12
Time: 10 min
  Conditions: Ambient temperature further oxidizing agents, further catalysts
  (Comment: Yield given) (Ref. 65)
  Classification: Preparation
  Reagent: benzoyl peroxide......Classification: Chemical behaviour
  Reagent: MCPBA
  Solvent: 1,2-dichloro-ethane
Temp: 25 C
Conditions: epoxidation of alkenes with MCPBA and MCPBA-O-D, kinetics, primary and secondary deuterium kinetic isotope effect, steric influence on epoxidation
reaction, mechanism, reaction transition state
Subject Studied: Rate constant (Ref. 79)
  Classification: Chemical....behaviour
  Reagent: H202
  Catalyst: CH3ReO3
  Solvent: acetonitrile H2O
  Temp: 25 C
  Conditions: pH 1, epoxidation of alkyl-substituted olefins by H2O2 catalyzed by
CH3ReO3 in MeCN-H2O or in CH3OD...10 C
Conditions: invetigation of the (tetrakis(2,6-dichlorophenyl)porphinato)iron(III) perchlorate-catalyzed epoxidation of olefins and oxidative cleavage of diols by
m-chloroperbenzoic acid and pentafluoroiodobenzene
                         ...MoO3
  Subject Studied...
  Solvent: 1,2-dichloro-benzene
  Temp: 110 C
  Conditions: transition metal oxide-catalyzed olefine oxidation, various olefins
(Ref. 99)
  Classification: Chemical behaviour
  Yield: 68 percent (BN=79912)
 Reagent....ITQ-7
Solvent: acetonitrile
Time: 3.5 hour(s)
  Temp: 59.85 C
  Reaction Type: Epoxidation (Ref. 103)
  Classification: Preparation
  Yield: 80 percent Chromat. (BN=79912)
  Reagent: acetaldehyde....aq. H2O2
  Solvent: various solvent(s)
Time: 20 hour(s)
  Temp: 60 C
  Reaction Type: Epoxidation (Ref. 105)
  Classification: Preparation
  Yield: 76 percent (BN=79912)
  Reagent: hydrogen peroxide ... ...ol various solvent(s)
  Time: 1 hour(s)
Temp: 79.85 C
  Reaction Type: Epoxidation (Ref. 125)
Classification: Preparation
 Yield: 99 percent Turnov. (BN=79912)
Reagent: 2,6....bound Ni(acac)2
Solvent: CH2Cl2
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Time: 4 hour(s) Temp: 25 C Reaction Type: Epoxidation (Ref. 140) Classification: Preparation Reagent: aq. H2O2 Catalyst: W/O-Ti-NaY Time....H2F6Naw17055)
Solvent: 1,2-dichloro-ethane Time: 24 hour(s) Temp: 60 C Reaction Type: Epoxidation (Ref. 142) Classification: Preparation Reagent: aq. H2O2 Catalyst: mesoporous titanium silicalite 1 Solvent: methanol Temp: 40 C Reaction Type: Epoxidation (Ref. 143) Classification: Preparation Reagent: aq. H2O2 Catalyst: Ti-Ge-ITQ-7 Solvent: acetonitrile
Time: 3.5 hour(s)
Temp: 59.85 C
Reaction Type: Epoxidation (Ref. 144)
Classification: Preparation Reagent: aq. H2O2 Solvent: various solvent(s) Time: 20 hour(s) Temp: 60 C Reaction Type: Epoxidation (Ref. 145) Classification: Preparation Yield: 41 percent Chromat. (BN=79912)
Reagent: aq. H202....ol various solvent(s)
Time: 1 hour(s)
Temp: 79.85 C Reaction Type: Epoxidation (Ref. 149) Classification: Preparation Yield: 57.6 percent Chromat. (BN=79912) Reagent: 02....2-dichloro-ethane Time: 22 hour(s) Temp: 20 C Pres: 760 Torr Reaction Type: Epoxidation (Ref. 150) Classification: Preparation Yield: 72 percent (BN=79912) Reagent: O2 benzhydrol.....N-hydroxyphthalimide Solvent: various solvent(s) Time: 24 hour(s) Temp: 90 C Reaction Type: Oxidation (Ref. 151) Classification: Preparation Yield: 72 percent (BN=79912)
Reagent: H2O2 H2O....Ph2AsMe
Solvent: 2,2,2-trifluoro-ethanol
Time: 45 min Temp: 75 C Reaction Type: Epoxidation (Ref. 152) Classification: Preparation Reagent: H2O2 Catalyst: MoO5(OAs(n-C12H25)3)(H2O)) Solvent: CHCl3 H2O Time: 24 hour(s) Temp: 60 C

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  Reaction Type: Epoxidation (Ref. 153)
  Classification: Preparation
  Reagent: N-hydroxyphthalimide O2 tetralin
  Catalyst: Co....Mo(CO)6
Solvent: benzonitrile
  Time: 14 hour(s)
  Temp: 60 C
  Reaction Type: Epoxidation (Ref. 154)
   Classification: Preparation
  Yield: 83 percent (BN=79912)
  Reagent: H2O2 Mn-trimethyltriazacyclononane ascorbic acid
  Reaction Type: Epoxidation (Ref. 155)
  Classification: Preparation
   Yield: 96 percent Turnov. (BN=79912)
  Reagent: H2O2
  Catalyst... ...pic)2)
  Solvent: H2O CH2Cl2
  Time: 24 hour(s)
   Temp: 20 C
   Reaction Type: Epoxidation (Ref. 156)
  Classification: Preparation
  Reagent: tetrabutylammonium monopersulfate
  Catalyst: MnTPFPP(OAc) n-Bu4NOAc....acetonitrile H2O Time: 11 hour(s)
  Temp: 0 C
ph: 7.0
  Reaction Type: Epoxidation (Ref. 164)
  Classification: Preparation
  Yield: 94 percent Chromat. (BN=79912)
  Reagent: hydrogen peroxide.....methyltrioctylammonium hydrogensulfate
  Solvent: H2O toluene
Time: 4 hour(s)
   Temp: 90 C
  Reaction Type: Epoxidation (Ref. 165)
Classification: Preparation
  Yield: 90 percent Spectr (BN=79912)
  Reagent: H2O2, H2O...bound Ni(acac)2
Solvent: CH2Cl2
  Time: 4 hour(s)
  Temp: 25 C
  Reaction Type: Epoxidation (Ref. 179)
  Classification: Preparation
  Yield: 86 percent (BN=79912)
  Reagent: Na2WO4*2H2O, aq ...
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search.txt
Activity and Lewis Acidity JCFTEV ; J.Chem.Soc.Faraday Trans. ;
91-8(1995)1261-1266...
 34/3,K/21 (Item 3 from file: 391) Links
Beilstein Database - Reactions
(c) 2007 Beilstein GmbH. All rights reserved.
Reaction Id: 140976
    Reactants
       BN=1424379 diphenylmethanol
      BN=1238185 benzophenone
    No. of Reaction Details: 274
    No. of References: 262
Reaction Details
  ...1238185)
  Reagent: benzyltriphenylphosphonium peroxodisulfate
  Solvent: acetonitrile Time: 0.5 hour(s)
  Conditions: Heating
  Reaction Type: Oxidation (Ref. 5)
  Classification: Preparation
  Yield: 92 percent Chromat. (BN=1238185)
  Reagent: tert-butyl....1,2-dichloro-ethane
Time: 12 hour(s)
Temp: 40 C
Reaction Type: Catalytic oxidation (Ref. 6)
  Classification: Preparation
  Yield: 95 percent (BN=1238185)
  Reagent: 02
  Catalyst: CeO2-Ru
  Time: 6 hour(s)
  Temp: 140 C
  Reaction Type: Oxidation (Ref. 7)
  Classification: Preparation
  Yield: 86 percent (BN=1238185)
  Reagent: Fe(NO3)3*1.5N2O4
Solvent: CH2Cl2
  Conditions: Ambient temperature further oxidizing agent, further conditions and
solvents (Ref. 8)
  Classification: Preparation
  Yield: 80 percent (BN=1238185...Et3N
  Solvent: CH2Cl2
  Temp: j:%-70 - 20 C
Subject Studied: Product distribution
  Reaction Type: Swern oxidation
Prototype Reaction: Further Variations: Reagents (Ref. 127)
  Classification: Chemical behaviour
  Yield: 98... ...14 hour(s)
  Temp: j:%-40 C
  Subject Studied: Product distribution
  Reaction Type: Corey-Kim oxidation
  Prototype Reaction: Further Variations: Solvents Reaction partners (Ref. 128)
  Classification: Chemical....33 hour(s)
Temp: j:%-60 - 20 C
  Subject Studied: Product distribution
  Reaction Type: Swern oxidation
  Prototype Reaction: Further Variations: Solvents Reaction partners (Ref. 128)
  classification: Chemical ... ... Temp: 44.85 C
  ph: 4.45
  Subject Studied: Kinetics Thermodynamic data
Reaction Type: Oxidation (Ref. 135)
Classification: Chemical behaviour
                                            Page 128
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search.txt
  Reagent: pyridinium fluorochromate p-toluenesulfonic acid
  Solvent: dimethylsulfoxide
  Temp: 24.85 C
  Subject Studied: Kinetics
  Reaction Type: Oxidation
  Prototype Reaction: Further Variations: Temperatures (Ref. 136)
  Classification: Chemical behaviour
  Reagent: sodium....NaClO4
  Catalyst: RuCl3
  Solvent: H2O methanol
Temp: 35 C
  Subject Studied: Kinetics
  Reaction Type: Oxidation
  Prototype Reaction: Further Variations: Reaction partners Reagents Solvents
pH-values (Ref... ... behaviour
  Reagent: benzyltrimethylammonium tribromide, sodium acetate
  Solvent: acetic acid H2O
  Temp: 60 C
Conditions: oxidation of various secondary alcohols to the corresponding ketones Subject Studied: Product distribution (Ref. 152....s)
Conditions: catalytic ability of the drift-type catalyst, var. resins, var. solvent, var. oxidating cation, var. temp., var. conc. (Ref. 153)
Classification: Chemical behaviour
  Yield: 96 percent (BN=1238185)
  Reagent: N-hydroxyphthalimide, pyridine, NaClO4
  Solvent: acetonitrile
  Conditions: electrolytical oxidation, anode potential 0.85 V (Ref. 154)
  Classification: Preparation
  Yield: 96 percent (BN... ... Product distribution (Ref. 173)
  Classification: Chemical behaviour
  Solvent: benzene
  Conditions: various temp., time, oxidizing agents and additives, reaction of var.
alcohols
  Subject Studied: Product distribution (Ref. 174... pyridinium chlorochromate
  Solvent: dimethylsulfoxide
  Temp: 24.9 - 71.9 C
  Conditions: rate constants for the oxidation by PCC at 298 K, 303 K, 308 K and 313
K, activation parameters (E a, \log A, Delta S + +) for the oxidation by PCC at 345
  Subject Studied: Kinetics Mechanism Rate constant (Ref. 179 ... ...Et3N
  Solvent: toluene
Time: 16 hour(s)
  Temp: j:%-40 C
Reaction Type: Corey-Kim oxidation (Ref. 184)
  Classification: Preparation
  Yield: 96 percent (BN=1238185)
  Reagent: KMnO4 aluminum ... ...Cl)2
  Solvent: H2O
  Time: 4 hour(s)
  Temp: 90 C
  Reaction Type: Oppenauer-type oxidation (Ref. 235)
  Classification: Preparation
  Yield: 99 percent (BN=1238185)
  Reagent: N-tert-butyl... ...02
  Catalyst: Na5PV2Mo10040
  Solvent: H2O
  Time: 18 hour(s)
  Temp: 90 C
  Reaction Type: Oxidation Oxidative dehydrogenation (Ref. 237)
  Classification: Preparation
  Yield: 90 percent (BN=1238185)
Reagent: benzyltriphenylphosphonium chlorochromate
  Solvent: CH2Cl2
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Time: 2 min
  Conditions: microwave irradiation
  Reaction Type: Oxidation (Ref. 238)
  Classification: Preparation
  Yield: 93 percent (BN=1238185)
  Reagent: benzyltriphenylphosphonium peroxymonosulfate
  Time: 5 min
  Reaction Type: Oxidation (Ref. 239)
  Classification: Preparation
  Yield: 86 percent (BN=1238185)
  Reagent: H2C=CH2
  Catalyst....2.2.0)octane dichromate
 Solvent: CH2Cl2
Time: 220 s
Conditions: Microwave irradiation
  Reaction Type: Oxidation (Ref. 242)
  Classification: Preparation
  Yield: 96 percent (BN=1238185)
  Reagent: bis(1-CH2Ph... ... 3.1.1 3,7 )decaneS208
  Solvent: acetonitrile
Time: 25 min
  Conditions: Heating
  Reaction Type: Oxidation (Ref. 243)
Classification: Preparation
  Yield: 93 percent (BN=1238185)
Reagent: 1-benzyl-4.....1-azoniabicyclo(2.2.2)octane dichromate aluminum
chloride
  Time: 60 s
  Reaction Type: Oxidation (Ref. 244)
  Classification: Preparation
  Yield: 100 percent (BN=1238185)
  Reagent: wet alumina ammonium chlorochromate
  Time: 3 min
  Conditions: microwave irradiation
  Reaction Type: Oxidation (Ref. 245)
Classification: Preparation
  Reagent: Br2/neutral alumina
  Solvent: CH2Cl2
  Time: 1 hour(s)
  Reaction Type: Oxidation (Ref. 246)
  Classification: Preparation
  Yield: 90 percent (BN=1238185)
  Reagent: benzyltriphenylphosphonium dichromate
  Solvent: acetonitrile
Time: 20 min
Conditions: Heating
  Reaction Type: Oxidation (Ref. 247)
  Classification: Preparation
  Yield: 99 percent (BN=1238185)
  Reagent: 02 MS3A... ... Catalyst: Pd(OAc)2
  Solvent: toluene Time: 2 hour(s)
  Temp: 80 C
  Reaction Type: Oxidation (Ref. 248)
Classification: Preparation
  Yield: 98 percent (BN=1238185)
Reagent: (n-BuPPh3)2Cr207
  Solvent: CHCl3
  Time: 0.75 hour(s)
  Conditions: Heating
  Reaction Type: Oxidation (Ref. 249)
  Classification: Preparation
  Yield: 100 percent (BN=1238185)
```

Reagent: BaMnO4 Time: 2 hour(s) Temp: 90 C

Reaction Type: Oxidation (Ref. 250)

Classification: Preparation

Yield: 93 percent Chromat. (BN=1238185)

Reagent: CrO3 HZSM-5

Time: 20 s

Conditions: microwave irradiation Reaction Type: Oxidation (Ref. 251)

Classification: Preparation

Reagent: PPh3 LiOH*H2O Catalyst: (p-cymene)RuCl2....percent (BN=1238185)

Reagent: Grieco-Dess-Martin periodinane

Solvent: acetonitrile

Time: 20 min

Reaction Type: Oxidation (Ref. 253)

Classification: Preparation Yield: 82 percent (BN=1238185) Reagent: zeolite HZSM-5...

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34/3,K/22 (Item 1 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved.
03288064 Supplier Number: 158500790 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Monday, December 4, 2006Poster Session III7:30 a.m. - 4:30 p.m.(Author abstract)

Akaike, Koichi; Tanaka, Shigeya; Imamura, Shin-Ichi; Kasugai, Motofumi; Matsukubo, Hideyuki; Tojo, Hideshi; Sano, Akira Epilepsia , 47 , s4 , 204(86)

oct , 2006

Document Type: Author abstract Publication Format: Magazine/Journal

ISSN: 0013-9580 Language: English

Record Type: Abstract Target Audience: Academic

Author Abstract: ...University Health Science Center, Amarillo, TX)

Rationale: The ketogenic diet is a high-fat, low-carbohydrate, low-protein diet that is anticonvulsant in drug-resistant epileptic children. Furthermore, it is anticonvulsive...the abnormal plasticity for clinical use. Erythropoietin (EPO), recently known as cytoprotective and anti-inflammatory agent, and neurogenic modulator, may constitute an effective therapeutic modality in cases of epileptic

insult. However... Hospital, Kagoshima, Kagoshima, Japan)

Rationale: To elusidate an antiepileptic property of gabapentine, we applied this agent to status epilepticus models induced by subcutaneous administration of kainic acid (KA).

Methods: Experiments were...derive energy from ketone bodies (acetoacetate and

beta-hydroxybutyrate, (beta)-OHB). The high fat, low carbohydrate ketogenic diet (KD) was developed as an alternative to fasting for seizure management. We previously....is a commercially prepared soy-oil-based KD for children with a fat to protein carbohydrate ratio of 4:1 and is more palatable than lard-based or medium chain triglyceride... ... separated in three groups (n = 8 mice/group) and were fed either a standard high carbohydrate (chow) diet unrestricted (SD-UR), KC unrestricted (KC-UR), or KC restricted (KC-R) to...lipophilic cell-permeable chelator was used as an iron chelator. Brain HBED concentrations, reduced and oxidized glutathione levels and the oxidative DNA lesion 8-hydroxy-2'-deoxyguanosine (80HdG/2DG) were measuredhippocampus. The time-course of the iron changes paralleled the inactivation of mitochondrial aconitase, DNA oxidation (80HDdG/2DG) and glutathione depletion. Systemically administered HBED, a synthetic iron chelator ameliorated SE-induced...the list of ion channels involved in epilepsy is the hyperpolarization-activated cyclic nucleotide-gated cation channels (HCN). Several studies in chronic human epilepsy and various animal models of temporal lobe...
...In order to evaluate these changes we aimed to investigate the consequences of a convulsant agent called pentylenetetrazol (PTZ). PTZ is a chemical frequently used Page 139

in the study of epileptic seizures...of convulsants we initially aimed to investigate the interaction of model membranes with a convulsant agent called picrotoxin (PTX). PTX is a noncompetitive antagonist at GABA-A receptors and it blocks...Conclusions: These results demonstrate that a single episode of seizure activity induced by a convulsant agent can alter the functional expression of motor maps. (Supported by Natural Sciences and Engineering Research...

34/3,K/23 (Item 2 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved.
02933056 Supplier Number: 92683171 (USE FORMAT 7 OR 9 FOR FULL TEXT) 02933056 Psychologic and physiologic effects of dieting in adolescents. (Review Article).

Daee, Allison; Robinson, Paul; Lawson, Melissa; Turpin, Julie A.; Gregory, Brooke; Tobias, Joseph D. Southern Medical Journal , 95 , 9 , 1032(10)

Sept , 2002

Publication Format: Magazine/Journal

ISSN: 0038-4348 Language: English

Record Type: Fulltext Target Audience: Professional Word Count: 7287 Line Count: 00698

...16-year-old girl who was attempting to follow a high-fat, high-protein, low-carbohydrate diet regimen. (6) In this paper, we assess the current dieting practices among adolescents and...

...bulimia attributed the development of their eating disorder to the inability to maintain a low-carbohydrate diet, leading to carbohydrate craving and subsequent cycles of binging and purging. (30) Restrained eating and dieting practices, independent...

...had chest pain, arm pain, and subsequent ventricular fibrillation while using thyroid supplements, a sympathomimetic agent, and thiazide diuretics to facilitate weight loss. He concluded, "The common use of inappropriate prescription...

..acids into the blood stream. This ketosis may be augmented by the inclusion of low carbohydrate intake, and, therefore, low endogenous insulin production. Low-carbohydrate/high-protein/high-fat diets have fallen in and out of popularity since the 1960s, resurfacing in various forms, including the Stillman Diet, the Scarsdale Diet, the Zone Diet, the Carbohydrate Addicts' Diet, and the Atkins Diet. These plans are attractive to many dieters because they...

..obese patients make less efficient use of insulin and overproduce insulin in response to a carbohydrate load, which favors conversion of carbohydrate to fat rather than to energy, even when there is an ongoing energy requirement. It...

...loss would occur, such as short fasts and overnight sleep. When a greater quantity of carbohydrate is ingested than can be used immediately or stored as glycogen, the excess is converted...

...do so only in the presence of a simultaneous glucose load. Therefore, on a low-carbohydrate diet, a state of dietary ketosis is achieved, regardless of the amount of fat-rich...

...of ketone bodies, which may also suppress the appetite and curb feelings of hunger.

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Low-carbohydrate/high-protein diets are not without potential for adverse biochemical and physiologic consequences, however. Ketone...

...in patients with gouty diathesis. Bloom and Azar (46) have reported that subjects on low-carbohydrate diets can have postural hypotension. Using an isolated, perfused rat-heart model, Russell and Taegtmeyer...

...beating heart loses contractile function (more than 50% loss of function in 60 minutes) when oxidizing acetoacetate alone. Elevated levels of free kitty acids may promote both vascular thrombosis and cardiac...

...ketone bodies, including acetoacetate and (beta)-hydroxybutyrate. These ketone bodies undergo urinary excretion with a cation to maintain electrical neutrality, resulting in the additional loss of cations, including calcium, magnesium, and potassium. (52) When compounded by inadequate intake, deficiencies of these cations may ensue. Find a conduction function in the following that the following conduction function is the following conduction function in the following conduction function is the following conduction function in the following conduction is the following conduction for the following conduction is the following conduction in the following conduction in the following conduction is the following con al (53) found altered cardiac-conduction function in rats fed a...practices is the use of diets that induce ketosis (very-low-calorie diets or low-carbohydrate/high-fat diets). With very-low-calorie diets, ketosis is induced by inadequate caloric intake and fatty-acid mobilization, while with low-carbohydrate diets, ketosis is induced by decreased insulin-release. When such diets are followed without supplementation...

...of food consumed, changing the type of food eaten, eating less meat, eating less high carbohydrate food, and eating low-calorie foods.

+ Unhealthy weight loss methods were defined as fasting, skipping...

...depletion. Am J Med 1983; 74:1016-1022 (46.) Bloom WL, Azar GJ: Similarities of carbohydrate deficiency and fasting: weight loss, electrolyte excretion, and fatigue. Arch Intern Med 1963; 112:333...

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34/3,K/24 (Item 3 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved.
02924098 Supplier Number: 81760722 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Review of harmful gastrointestinal effects of carrageenan in arrimal experiments. (Research Review).

Tobacman, Joanne K. Environmental Health Perspectives , 109 , 10 , 983(12) Oct , 2001

Publication Format: Magazine/Journal

ISSN: 0091-6765 Language: English

Record Type: Fulltext Target Audience: Academic Word Count: 11651 Line Count: 01586

Text:

...words: carcinogenesis, carrageenan, carrageenase, diet, furcelleran (furcellaran), hydrolysis, inflammatory bowel disease, nutrition, poligeenan, promoter, sulfated polysaccharide. Environ Health Page 141

- ...Federal Regulations. The stipulations for its use include the following: a) it is a sulfated polysaccharide, the dominant hexose units of which are galactose and anhydrogalactose; b) range of sulfate content...
- ...beta)-1,4 linkages), but they differ in degree of sulfation, extent of branching, solubility, cation binding, and ability to form gels under different conditions. (lambda)-Carrageenan is the least branched...
- ...studies in which carrageenan appears to be a promoter of malignancy in association with another agent, d) studies using a rat model, e) studies using a guinea pig model, f) studies...
- ...has been implicated in the development of ulcerative colitis, perhaps attributable to interference with butyrate oxidation by colonic epithelial cells (114,115). Butyrate has been shown to induce intestinal cellular differentiation...disruption of lysosomes by accumulation of carrageenan by-products or by interference with normal cellular oxidation-reduction processes from sulfate metabolites--emerges from review of the experimental studies. The impact of...
- ...dextran sulfate sodium, have induced ulcerations and neoplasia, suggesting that the degree of sulfation and polysaccharide molecular weight may be critical for induction of the observed effects (102).

 The major pieces...
- ...and (kappa) combine easily with milk proteins to improve solubility and texture; serve as thickening agent, emulsifier, stabilizer.
- Synergistic effects With locust bean gum, increase in gel strength.
 Other hydrocolloids may...Lee K-H, Wong H-A.
 The molecular weight and viscosity of the water-soluble polysaccharide(s) from Eucheuma spinosum. Carbohydr Res 81:1-6 (1980).
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- 34/3,K/25 (Item 4 from file: 149) Links
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 (c) 2007 The Gale Group. All rights reserved.
 01906886 Supplier Number: 62212344 (USE FORMAT 7 OR 9 FOR FULL TEXT)
 Herbicide Formulations.

Tominack, Rebecca L. Journal of Toxicology: Clinical Toxicology , 38 , 2 , 129 March 2000 Publication Format: Magazine/Journal; Refereed ISSN: 0731-3810 Language: English Record Type: Fulltext; Abstract Target Audience: Professional Line Count: 00398 Word Count: 4530 ...g., distearyl dimonium chloride, isopropyl palmitate, titanium dioxide); pH buffer (e.g., ammonium hydroxide); antifoaming agent (e.g., dimethicone); and a biocidal preservative (e.g., methyl parabens). The multiagent nature of... ...fungicides, and insecticides. The active ingredient is rarely if ever used commercially as a single agent preparation but must be formulated with other ingredients to allow mixing, dilution, application, and stability...an oil-in-water emulsion upon dilution with water. There may be an additional wetting agent for leaf penetration, a polymeric stabilizer to keep the oil droplets from coalescing, a preservative... ...simply becomes a more dilute solution when water is added. There is usually a wetting agent or surfactant, and perhaps other adjuvants for physical stability such as buffers and preservatives or... ... For example, if a dough is formed for extrusion, the formula may require a binding agent to hold the dough together, an agent to make it plastic enough for extrusion, and a glidant to get it through the...of the active ingredient into the leaf through the waxy cuticle and the water-soluble carbohydrate fraction by their dual solubility. Some aid movement into the substomatal reservoir which improves systemic... ...surfactants is the presence of a sulfate, sulfonate, or phosphate moiety as well as a cation for salt formation (Table 1). Table 1 Common Agricultural Surfactant Classes Nonionic Surfactants Anionic Surfactants...mold, fungal, and bacterial growth; 2. acid scavengers such as epoxidized soybean oil to prevent oxidation of unsaturated bonds; 3. antifreeze such as ethylene or propylene glycol to allow overwintering stability... >>>W: KWIC option is not available in file(s): 399 34/3, K/26 (Item 5 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. Supplier Number: 55067345 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01844671 Vanadium. Barceloux, Donald G.
Journal of Toxicology: Clinical Toxicology , 37 , 2 , 265 March , 1999 Publication Format: Magazine/Journal; Refereed ISSN: 0731-3810 Language: English Record Type: Fulltext; Abstract Target Audience: Professional Line Count: 00771 Word Count: 8280 Author Abstract: Vanadium is a steel-grey, corrosion-resistant metal, which exists in oxidation states ranging from -1 to +5. Metallic vanadium does not occur in Page 143

nature, and the...

...the name panchromium because of the color changes that occur during the transition to various oxidation states.(1) Nils Sefstrom purified vanadium in the oxide form in 1831 and named the...

...natural component of fuel oils. Vanadium probably corrodes the oil-heated boilers by catalyzing the oxidation of sulfur dioxide to sulfur trioxide.(6) Most clinically significant exposures to vanadium occur when...

...powder that is sparingly soluble in water. This steel-grey, corrosion-resistant metal exists in oxidation states from -1 to + 5, but the most common valences are +3, +4, and +5. Metallic vanadium does not occur in nature. The most stable oxidation state is the quadrivalent salts ((VO.sup.+2), vanadyl). Trivalent vanadium ((V.sub.2)(O.sub.3)) is a strong reducing agent that dissolves in acid to form a green hexaqua ion. Pentavalent salts include metavanadate ((MATHEMATICAL...as a catalyst include the following processes: petroleum cracking, purification of exhaust gases, and the oxidation of ethanol.

Sources Air

General

Exposure of the general population to vanadium in air results...of rock may release vanadium to air or water and also precipitate vanadium with polyvalent cations or organic complexing agents.

Relatively small amounts of vanadium are transported via water compared...

...sup.2+), VO((OH).sup.+)) in reducing environments and as the pentavalent vanadate form under oxidizing conditions. Transport of vanadium in water occurs primarily in suspension, and to a much lesser...

...complaints. The daily ingestion of ammonium vanadyl tartrate 50-100 mg as a cholesterol-lowering agent for several weeks was associated with fatigue, lethargy, abdominal cramps, loose stool, and a green... days).(42)

PATHOPHYSIOLOGY Mechanism of Action

The systemic effects of vanadium probably result from its oxidizing ability. (43) Vanadium also inhibits oxidative phosphorylation, (44) but the role of this mechanism in...

...lower life forms, vanadium reacts with hydrogen peroxide to form a pervanadate that catalyzes the oxidation of halide ion and also stimulates the phosphorylation of receptor proteins.(18) Thyroid peroxidase is...vanadate is less than by insulin, but vanadate produces greater simulation of lactate and glucose oxidation than insulin.(55) Both vanadyl and vanadate compounds mimic the action of insulin in isolated...

...of exposure depending on the absorbed dose of vanadium.(75) Vanadium is a weak sensitizing agent of skin at high concentrations. One study associated the development of a dry eczematous dermatitis...are available on methods to enhance the elimination of vanadium. Ascorbic acid was a recommended agent for the treatment of vanadium toxicity based on its ability to reduce the pentavalent vanadate the most effective agent to prevent vanadium poisoning; however, deferoxamine and tiron (4.5-dihydroxy-1, 3-benzene-disulfonic...

...G, Chen X, Ruiz J, van Rossum GDV, Turco S. Effects of vanadyl sulfate on carbohydrate and lipid metabolism in patients with Page 144

search.txt non-insulin-dependent diabetes mellitus. Metabolism 1996;45:1130...

34/3,K/27 (Item 6 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. Supplier Number: 20790314 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01770354 A natural approach to cardiovascular disease and lowering cholesterol risk.

Drug Store News , v20 , n8 , pCP24(1) May 25, 1998

Publication Format: Magazine/Journal

ISSN: 0191-7587 Language: English

Record Type: Fulltext Target Audience: Trade Word Count: 7540 Line Count: 00637

...when more LDL circulates, more gets layered into the subendothelial space. Secondly, when LDL gets oxidized or glycosylated, it is capable of damaging the arteries and initiating the whole process of...

...adequate antioxidant protection appears to increase the risk of cardiovascular disease. Polyunsaturated oils are easily oxidized, creating free radicals that lead to vascular damage. The process of hydrogenation is another compounding...

...to be inversely correlated with heart disease. The flavonoid antioxidants in wines probably prevent the oxidation of LDL cholesterol. Some wines also contain levels of salicylic acid sufficient to contribute to...role in the prevention of heart attacks because it can reduce platelet adhesion and prevent oxidation of LDL cholesterol.

In the now-famous CHAOS study (Cambridge Heart Antioxidant Study), patients with...elderly, athletes and pregnant women. Chromium is felt to contribute to the regulation of lipid, carbohydrate and protein metabolism.

Studies with diabetics show that, in addition to the blood sugar-regulating ...reductase-inhibiting activity as at least part of its action. Studies have shown that this agent can reduce cholesterol. However, several points should be made. First, since this has HMG-COA reductase-inhibiting activity, supplementation with coenzyme Q10 should be recommended. Adverse reactions from taking this agent include heartburn, abdominal distention and dizziness. It should not be taken by individuals with liver

...an important herb that came from Ayurvedic medicine. It has been researched as a hypolipidemic agent for the last two decades. Not only has guggul been shown to reduce VLDL, LDL...benefits, including anti-carcinogenic, immune enhancement, anticariogenic and, in addition, may be a powerful preventive agent in the progression of atherosclerosis and hypertension. Green tea's polyphenols are known to block...

...where the fat is metabolized to produce energy. However, it also increases the rate of oxidation so that more fat is burned and more energy is produced. L-carnitine also improves...

...with a healthful diet consisting primarily of fresh fruits, vegetables, moderate whole grains and complex carbohydrate intake, legumes, lean meats and monounsaturated oils, such as olive oil. In general, people are ...Intracellular Free Magnesium in Erythrocytes of Essential Hypertension: Relation to Blood Pressure and Serum Divalent Cations." Proceedings of the National Academy of Sciences of the United States of America 81(1984)

...a. When it is elevated. b. When it reacts with antioxidants. c. When it becomes oxidized. d. When it combines with HDL cholesterol. 5. Chromium affects cardiovascular risks by a. Lowering HDL cholesterol. b. Decreasing glycosylation. c. Elevating triglycerides.d. Oxidizing LDL cholesterol. 6. Homocysteine is a substance that a. Protects blood vessels against microvascular damage. b. Oxidizes HDL cholesterol.c. Damages blood vessels and promotes atherosclerosis. d. Increases cardiovascular risks by lowering... ..a. It can help to reverse the build-up of atherosclerotic plaque deposits. b. It oxidizes LDL cholesterol. c. It can improve peripheral circulation in patients with intermittent claudication. d. It... 34/3,K/28 (Item 7 from file: 149) Links TGG Health&Wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. Supplier Number: 14825528 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01473324 Effects of glucose and fatty acids on myocardial ischaemia and arrhythmias. (Review Article) Oliver, M.F.; Opie, L.H. The Lancet , v343 , n8890 , p155(4) Jan 15 , 1994 Publication Format: Magazine/Journal ISSN: 0099-5355 Language: English Record Type: Fulltext; Abstract Target Audience: Professional Word Count: 3743 Line Count: 00324 Author Abstract: ...FFA. We have taken into account new knowledge of the effects of fatty acids on cation channels and brought up to date the arguments for metabolic intervention with glucose-insulin solutions... ...if the molar ratio of FFA to albumin is sufficiently high.[16] During ischaemia, [beta]-oxidation of lipids in mitochondria is inhibited and there is accumulation of intracellular acylcarnitine and acyl...acid, which indicates peroxidation, is detectable in the plasma of patients during infarction, and lipid oxidation products increase during intravenous thrombolysis.[35] Rats fed with saturated fatty acids had a high...be a very rapid and maintained inhibition of lipolysis. Nicotinic acid is a powerful antilipolytic agent but it also reduces peripheral arterial resistance, increases heart rate and cardiac work, and is... ...lactate, and pyruvate uptake and also switches the reliance of the myocardium from fat to carbohydrate without a change in oxygen

There is...reperfused after a transient period of global ischaemia is accompanied by a stimulation of glucose oxidation. Circ Res 1993; 87: 972-81.

consumption.[43] Also, carnitine enhances glycosis.[44]

search.txt National Heart and Lung Institute, London (Prof Emeritus M...

34/3,K/29 (Item 8 from file: 149) Links
TGG Health&wellness DB(SM)
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01424425 Supplier Number: 14347053 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Rapid, accurate urine testing at the bedside. (includes related article) (Reagent Testing, part 1)
Zaloga. Gary P.

Zaloga, Gary P. Consultant , v33 , n6 , p90(7) June , 1993

Publication Format: Magazine/Journal

ISSN: 0010-7069 Language: English

Record Type: Fulltext; Abstract Target Audience: Professional

Word Count: 4259 Line Count: 00359

...are available. These strips measure specific gravity using ionic concentration methodology. In the presence of cations, protons are released by a complexing agent on the test strip. These protons react with the indicator bromthymol blue, which changes color...enzyme glucose oxidase to catalyze the formation of gluconic acid and hydrogen peroxide from the oxidation of glucose. A second enzyme, peroxidase, catalyzes the reaction of hydrogen peroxide with a chromogen...

...of glucose.
Glucose oxidase is a specific indicator for the presence of glucose; however, glucose oxidation is inhibited by ascorbic acid and ketone levels higher than 40 mg/dL, creating false...

...sugar.
False-positive reactions may be produced by residues of bromides, copper, iodides, and other oxidizing cleaning agents in the urine container. Test strips must be kept dry and free of...

...ketones are useful for diagnosing and monitoring diabetic ketoacidosis, alcoholic ketosis, and other diseases of carbohydrate and lipid metabolism.|16-19

These tests fail to measure |Beta -hydroxybutyric acid, the major...

...21
The dipstick contains organic peroxide, which reacts with hemoglobin and myoglobin to catalyze the oxidation of the indicator.
Intact erythrocytes will hemolyze on the test paper of the dipstick and...

...mg/dL delay the reaction.

False-positive reactions may be seen in the presence of oxidizing cleaning agents. Urine obtained during menstruation may also yield a positive result. Also, urine from...negative result, specimens should not be collected in containers that have been cleaned with strong oxidizing agents.

Cephalexin, gentamicin, and albumin concentrations greater than 500 mg/dL have been reported to...

34/3,K/30 (Item 9 from file: 149) Links TGG Health&wellness DB(SM)

(c) 2007 The Gale Group. All rights reserved. Supplier Number: 12900234 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01371215 Skin constituents as cosmetics ingredients.

Rieger, Martin Cosmetics and Toiletries , v107 , n11 , p85(9) Nov , 1992

Publication Format: Magazine/Journal

ISSN: 0361-4387 Language: English

Record Type: Fulltext Target Audience: Trade Word Count: 6946 Line Count: 00597

...in which it was produced in by the sebaceous gland. It is subject to air oxidation and the action of endogenous and exogenous (microbial) lipolytic enzymes. The liquids excreted by the...This is much easier to achieve in vitro by exposing a cell culture to the agent of choice. whether the same target in a cell can be reached in vivo should...precursor of sterols, including ergosterol. The conversion of squalene to these critically important substances requires oxidation (by squalene per-oxidase), cyclization and demethylation. Squalene, which contains six (trans) double bonds, and...

...about 10% of these acids in ceramides are monounsaturated. The terminal methyl group may be oxidized and esterified with linoleic acid. Some of the structural details of ceramide-related materials are...be part of the components found among the water solubles in skin. This includes the cations [Na.sup.+] and [K.sup.+], and the anions [HCO.sup.-.sub.3] and [Cl.sup...acid sequence in proteins exhibits a high degree of interspecies conservation. This applies also to carbohydrate -modified proteins, such as the proteoglycans. As the human genome studies continue, in-vitro synthesis...keratinocytes in normal skin.

Glycoproteins: Glycoproteins are proteins which carry covalently bound, relatively short oligomeric carbohydrate molecules. The best known of these is fibronectin. It is found in the extracellular matrix...

...35 183-195 (1984) [16.] K Laden and R Spitzer, Identification of a natural moisturizing agent in skin, J Soc Cosm Chem 18 351-360 (1967) [17.] G Pascher, Cis- und...

34/3,K/31 (Item 10 from file: 149) Links TGG Health&Wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. 01313803 Supplier Number: 11666490 (USE F Supplier Number: 11666490 (USE FORMAT 7 OR 9 FOR FULL TEXT) Drug-nutrient interactions.

Trovato, Aldo; Nuhlicek, Dale N.; Midtling, John E. American Family Physician , v44 , n5 , p1651(8)

Nov , 1991

Publication Format: Magazine/Journal

ISSN: 0002-838X Language: English

Record Type: Fulltext; Abstract Target Audience: Professional Word Count: 2661 Line Count: 00296

Abstract: ...including acetaminophen, amoxicillin and other antibiotics, antihypertensive medications, and many others. The effects of high- carbohydrate and high-protein diets on various medications are discussed. Common foods can cause a hypertensive...

...or secondary. Primary drug-induced malabsorption is due to the direct effects of the pharmacologic agent on the intestinal mucosa or on the intraluminal processes. Secondary drug-induced malabsorption is due... the nutrient unavailable for absorption. The most common interactions involve tetracycline and divalent and trivalent cations, which are present in milk, dairy products, iron preparations and antacids. These products should be...

...extraction. Food can increase absorption of these drugs by decreasing first-pass metabolism. [17] High-carbohydrate meals can decrease gastric emptying time, leading to increased absorption of hydrochlorothiazide (Esidrix, HydroDIURIL, Oretic...

...DRUG METABOLISM

Drugs are metabolized by two basic reactions. The phase I reaction involves an oxidation, hydroxylation, reduction or hydrolysis reaction, which changes a functional molecular group on the drug. The...

...16,18] Most of the effects of diet on drug metabolism involve the phase I oxidation reaction.

The typical recommended diet for healthy Americans contains 50 to 60 percent of calories as carbohydrate and 0.8 g of protein per kg of body weight per day. High-carbohydrate and low-protein diets (60 percent of calories as carbohydrate, 0.6 or less of protein per kf of body weight per day) decrease the metabolism of certain drugs such as theophylline. One the other hand, low-carbohydrate and high-protein diets (40 percent of calories as carbohydrate 1.5 g of protein per kf of body weight per day) increase the levels...

...in moderation. The dietary restrictions should be maintained for two weeks following discontinuation of the agent. [20]

DRUG ANTAGONISTS

Natural licorice or licorice extracts containing glycyrrhizic acid can complicate hypertension and...with alcohol is the disulfiram-like reaction. Drugs that inhibit the enzyme acetaldehyde dehydrogenase, which oxidizes acetaldehyde and the associated nausea and vomiting within minutes of alcohol ingestion. The possibility of...

...Patients receiving oral hypoglycemics may need to avoid alcohol because acute alcohol ingestion can alter carbohydrate metabolism, leading to hypoglycemia. [24] Chronic alcohol use can cause increased hepatic metabolism of sulfonylureas...

...307.

[19] Kappas A, Anderson KE, Conney AH, Alvares AP. Influence of dietary protein and carbohydrate on antipyrine and theophylline metabolism in man. Clin Pharmacol Ther 1976;20:643-53.

34/3,K/32 (Item 11 from file: 149) Links
TGG Health&wellness DB(SM)
(c) 2007 The Gale Group. All rights reserved.
01185813 Supplier Number: 07609829 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Metabolic acidosis with an elevated anion gap.

Hertford, Jo Ann Fiorito; McKenna, James P.; Chamovitz, Bruce N. American Family Physician , v39 , n4 , p159(10)
April ,
1989

Publication Format: Magazine/Journal

ISSN: 0002-838X Language: English

Record Type: Fulltext Target Audience: Professional Word Count: 3372 Line Count: 00425

...Anion Gap and Osmolal Gap

Anion gap is defined as the difference between measured serum cations and anions. An elevated anion gap reflects an increase in "unmeasured" anions--usually organic acids...

...may cause a mildly elevated anion gap due to ketosis from lipolysis and increased Beta-oxidation of free fatty acids in the liver.(8) Treatment is proper dietary modification.

POISONING

Methanol...result in respiratory acidosis. At a later stage of poisoning, a direct toxic effect on carbohydrate metabolism produces the classic high anion gap metabolic acidosis. (14) The Done nomogram, which is...

...than 100 mg per dL [145 mmol per L]), hemodialysis is indicated (14) Paraldehyde. This agent is used as a sedative and an antiseizure medication. The average minimal lethal blood level...

34/3,K/33 (Item 12 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. Supplier Number: 04163484 (USE FORMAT 7 OR 9 FOR FULL TEXT) 01099266 Gordon Research Conferences. (Summer, 1986)

Cruickshank, Alexander M. Science , v231 , p1163(37) March 7 1986

Publication Format: Magazine/Journal

ISSN: 0036-8075 Language: English

Record Type: Fulltext Target Audience: Academic

Word Count: 28553 Line Count: 03203

...use as a test reaction."

26 June. G. B. Fisher, "The mechanisms of the CO oxidation and NO reduction reactions on single crystal and supported rhodium at low and high pressures.. ...P-glycoprotein"; Francis Sirotnak, "Interaction of lipophilic drugs with tumor cells." Novel concepts of alkylating agent pharmacology (Kenneth D. Tew, discussion leader): J. William Lown, "Molecular recognition in the design of...Noble, "Mathematical modeling of facilitated transport in liquid membranes"; Reed M. Izatt, "Carrier-mediated cation transport in liquid membrane systems."

Chemistry at Interfaces Kimball Union Academy

Adrian Parsegian, chairman; Lloyd Abrams...School

Edward H. Nicollian, chairman; Edward H. Poindexter, vice chairman. 14 July. The thermal oxidation of silicon (Joseph Maserjian, discussion leader): Eugene Irene, "Low-temperature thin-film oxidation"; J. P. Krusins, "Rapid thermal oxidation"; W. A. Tiller, "Photoenhanced oxidation." (J. Wortman, discussion leader): David Baglee, "Growth and characterization of thin SiO.sub.2"; A. Reisman, "The oxidation kinetics of silicon."

oxidation kinetics of silicon."
15 July. Paramagnetic defects in MOS systems (Edward H. Poindexter,

discussion leader): Arthur...

...Schoolnik, "Identification of E. coli ST receptor with synthetic toxin analogues"; J. Edward Brown, "Carbohydrate receptor for Shiga and Shiga-like toxin." Bacterial pili and attachment (Staffan Normark, discussion leader): Paul...P. Curran, "Recent advances in organic synthesis via free radical reactions." John Swenton, "Anodic oxidation

chemistry in organic synthesis."

15 July. A. I. Meyers, "Asymmetric C--C bond forming reactions"; Art ... of mixed copper/iron clusters"; J. W. Faller, "Selectivity and the reactivity of higher oxidation state organometallics"; J. Schwartz, "New chemistry of oxide-bound organometallic complexes."

Participants desiring to display a...School
Alley E. Watada, chairman; William J. Bramlage, vice chairman.
7 July. Cell wall carbohydrate metabolism during fruit

maturation and ripening (D. Nevins, chairman): K. Gross, "Fruit cell wall compositional changes...

...on neuropeptides"; E. Stadtman, I. Rose, "Cytoplasmic protein degradation with substrates targeted by oxidation or ubiquitination

Posters encouraged.

Pulmonary Biology: Lung Inflammation
Colby-Sawyer College (S)
P. Henson, chairman; B. Smith...16 June. (Gerhard L. Closs, discussion leader): Heinz D. Roth, "New organic radical cations--homoconjugation, homoaromaticity, and unusual energy surfaces"; Leo Radom, "Distonic radical cations: Structures, stabilities, and unimolecular reactions"; Nathan L. Bauld, "New developments in cation radical cycloadditions." (Paul D. Bartlett, discussion leader): Stephen F. Nelsen, "Tetraalkylolefin, diene, and triene cation radical charges, paul G. Gassman, "Cation radicals from photoinduced electron transfer reactions";

from photoinduced electron transfer reactions."

17 June. (Lord John M. Tedder, discussion leader): Michael L. Gross,
"Reactions of gas-phase aromatic radical cations with olefins,
dienes, and alkyl iodides: New routes to alkyl benzenes and indans";
Richard N. McDonald, "The...

...Radical ions in halogenated matrices: Structure and reactions"; Alexander D. Trifunac, "Transient radical cations in hydrocarbons"; Larry Kevan, "Photoionization in micellar and vesicular frozen solutions." (Kevin Peters, discussion leader): Noboru Mataga...John Newsam, "Progress in the structural characterization of zeolites"; Peter Davies, "Effects of cation ordering on the behavior of crystalline fast ionic conductors." (Gerald Mahan, discussion leader): Klaus Funke, "Debye-Huckel ...D.

15 August. Ions and molecular beams: Richard Saykally, "Vibrational spectroscopy of molecular cations, anions, and Van der Waal's bonds"; Rick Smalley, "Molecular beam spectroscopy of clusters." Conferees are invited...

34/3,K/34 (Item 13 from file: 149) Links TGG Health&wellness DB(SM) (c) 2007 The Gale Group. All rights reserved. 01057468 Supplier Number: 02665462 (USE F Supplier Number: 02665462 (USE FORMAT 7 OR 9 FOR FULL TEXT) Gordon Research Conferences. (includes schedules) (calendar)

Science , v219 , p1095(35) March 4, 1983

Document Type: calendar Publication Format: Magazine/Journal

ISSN: 0036-8075

Language: English

Record Type: Fulltext Target Audience: Academic Word Count: 26464 Line Count: 03173

...immunoglobulins.'

28 June. (P. A. Sandford, discussion leader): D. A. Brant, "Realistic molecular modeling of polysaccharide solution conformation; G. O. Aspinall, "Selective fragmentations of polysaccharides.' (D. H. Ball, discussion leader): K...

...transport of lysosomal enzymes.'

1 July. (L. Anderson, discussion leader): Y. Ishido, "Novel aspects in carbohydrate chemistry: Regioselective protection and glycosylation reactions'; P. Sinay, "The chemical synthesis of heparin oligosaccharide fragments...in human AML'; Saul Zimm, "Pharmacokinetics of 6-mercaptopurine: A new look at an old agent.

Chronobiology

Colby-Sawyer College (S)

Colby-Sawyer College (S)
Charles F. Ehret, chairperson; Jerry Feldman, vice chairperson.
Circadian Regulation...Graham, "Oxygen diffusion studies in growing films using the 180 isotope and sims.'
26 July. Oxidation of alloys: G. Yurek, "Oxidation of rapidly solidified alloys'; M. Bennet, "Effects of ion implantation on oxidation of alloys.' Growth of alumina scales: D. J. Field, "Mechanisms of oxidation of aluminum and aluminum alloys'; R. A. Ramanarayanan, "Al203-scales on Fe-base ODS alloys...Les Dutton, "Electrogenic reactions in the bc1 complex.' (Angelo Azzi, poster discussion leader). discussion leader).

16 August. Cation translocating ATPases: (A) Structure and function (Ernesto Carafoli, session chairperson): Ernesto Carafoli,
"Introduction and over-view --comparative aspects of cation motive
ATPases'; Robert Fillingame, "The H -ATPase of Escherichia coli'; Andre
Goffeau, "The H -ATPase of fungal plasma membranes.' (John Walker, poster
discussion leader). Cation translocating ATPases: (B) How do they
couple ATP hydrolysis to cation transport? (R. Brian Beechey,
session chairperson): R. Brian Beechey, "Introduction and overview';
William lencks "Coupling mediated"

William Jencks, "Coupling...mediated
6 July. C. Thorpe, "Flavoproteins in
6 July. C. Thorpe, "Flavoproteins in fatty acid oxidation:
Recent developments'; J. Knowles, "Problems in the Shikimate pathway'; S.
Renkovic (C. Walsh session chairperson cell production': 6 Stewart Benkovic. (C. Walsh, session chairperson...cell production'; G. Stewart, "Genetics in baking, brewing and wine making-- yeast as a cloning agent.

10 August. Implications of genetic engineering (D. Linebeck, session chairperson): R. W. Hardy, "Implications to...

...A. Porter, discussion leader): E. G. Janzen, "Applications of spin trapping in micelles'; T. Mill, "Oxidation chemistry of vitamin E and other phenols in bilayers and solution.' J. M. McBride, "Single...

...in free radical and carbene chemistry'; J. J. Kurland, "A kinetic-mechanistic model of butane oxidation.'

Fuel Science

New Hampton School Leon M. Stock, chairperson; Randall E. Winans, vice chairperson. 4...function in the N-linked oligosaccharides; I. A. Wilson, "T structure and role of the carbohydrate moieties of influenza virus hemagglutinin'; Hans Vliegenthart, "High resolution proton NMR studies on the Oglycosidic carbohydrate chains of glycoproteins.' Metabolic control of dolichol pyrophosphate oligosaccharide synthesis and factors controlling distribution of...H. Bock, "Optimization of (heterogeneously catalyzed) gas reactions using photoelectron spectroscopy'; C. A. Tolman, "Hydrocarbon oxidation by transition metal complexes'; T. J.

Collins, "Perspectives in the development of selective oxidizing agents'; A. Sen, "Role of transition metal alkyls and acyls in the catalytic carbonylation of...

...Evans, "Reactivity of organolanthanide hydrides'; R. A. Andersen, "Bis(pentamethycyclopentadienyl)ytterbium as an electron transfer agent toward organic, inorganic, and organometallic compounds'; J. L. Atwood, "Structural aspects of organolanthanide reactivity.' Organometallic...21 July. Ion exchange properties of clay minerals (Adrian Cremers, session chairperson): Garrison Sposito, "Ternary cation exchange in clay minerals'; Oscar Talibudeen, "Calorimetry of ion exchange reactions of the phyllosilicates in...L. Liebert, "Ferronematics--stable suspensions of magnetic grains in a nematic phase'; G. A. Jeffrey, "Carbohydrate liquid crystals.' R. Oldenbouig, "Light scattering studies of the liquid crystalline phase in virus solutions... biosynthesis.' studies of the liquid crystalline phase in virus solutions...biosynthesis.'
Function of membrane lipids and proteins in cellular development: Ronald
Schnaar, "Immobilized glycolipids support carbohydrate-specific cell
adhesion'; William Lennarz, "Glycoprotein synthesis and embryonic
development'; Lucy Shapiro, "Role of membrane...A. Paul Schaap, discussion
leader): Donald R. Arnold, "Radical ions in photochemistry'; Anthony
Ledwith, "Radical cations in photochemically induced polymerization
and cyclodimerization.' (Jack Saltiel, discussion leader): Marye Anne Fox,
"Mechanistic aspects...Yoon, "Nematic order of semiflexible polymers.'
Natural polymers (F. E. Bailey, session chairperson): R. Marchessault, "
Carbohydrate polymers: Nature's high performance materials.'

8 July. Polymer degradation (H. J. Langer, session chairperson... 8 July. Polymer degradation (H. J. Langer, session chairperson...

...and function I (John Rupley, session chairperson): John Moult, "Water around proteins'; Don Wiley, "Bound carbohydrate'; Gerard de Hass, "Lipid interactions.' The protein surface and function II (Joseph Kraut,

session chairperson...

...Merck macromolecular graphics and the mechanism of thermolysin'; Michael Liebman, "Design of colchicine-like antitumor agent.'

29 July. Lipophilicity and drug action (Manfred Wolff, session chairperson): Robert Pearlman, "Chymotrypsin inhibitors: Theoretical... applications of RO technology (J. K. Beasley, discussion leader): E. Klein, "Membranes for protein and carbohydrate separations: Theory and problems'; E. F. Casassa, "Statistics of confined polymer chains'; P. Blias, "From...of molecular ions in rare gas solids'; Lon Knight, "Techniques for the trapping of molecular cation radicals in neon matrices at 4 K for ESR investigation.' Tadamasa Shida, "High energy radiation... radiation...

34/3,K/35 (Item 1 from file: 444) Links Fulltext available through: ScienceDirect New England Journal of Med. (c) 2007 Mass. Med. Soc. All rights reserved. 00106480 Copyright 1989 by the Massachusetts Medical Society

Recent Developments In The Understanding Of The Pathogenesis And Treatment Of Anaerobic Infections (first of Two Parts) (Medical Progress)

Styrt, Barbara; Gorbach, Sherwood L. The New England Journal of Medicine Jul 27 , 1989 ; 321 (4),pp 240-246

Line Count: 00371 Word Count: 05126

...host cells as the first step in invasion (Ref. 25,26). The formation of a Page 153

polysaccharide capsule may be a virulence factor in bacteroides (Ref. 27-32) and gram-positive anaerobes...with aerobes and anaerobes may help perpetuate the combination (Ref. 78). The lowering of the oxidation-reduction potential of the microenvironment by facultative organisms creates more favorable conditions for the growth...

Cited References ...to bovine ruminal cells. J Med Microbiol 1987; 23:69-73. 27. Kasper DL. The polysaccharide capsule of Bacteroides fragilis subspecies fragilis: immunochemical and morphologic definition. J Infect Dis 1976; 133:79-87.
28. Onderdonk AB, Kasper DL, Cisneros RL, Bartlett JG. The capsular polysaccharide of Bacteroides fragilis as a virulence factor: comparison of the pathogenic potential of encapsulated and....DL, Lonngren J. Virulence factors in infections with bacteroides fragilis: isolation and characterization of capsular polysaccharide and lipopolysaccharide. Scand J Infect Dis Suppl] 1982; 35:45-52. 32. Brook I, Walker...1984; 6:Suppl 1:S34-S39 44. Hawley CE, Falkler WA Jr. The effect of divalent cation chelators and magnesium on activation of the alternative complement pathway by Fusobacterium polymorphum (nucleatum). J...management of bacterial diarrhea. Rev Infect Dis 1983; 5:246-57. 98. George WL. Antimicrobial agent -associated colitis and diarrhea: historical background and clinical aspects. Rev Infect Dis 1984; 6:Suppl... 34/3,K/36 (Item 1 from file: 354) Links Fulltext available through: USPTO Full Text Retrieval Options Ei EnCompassLit(TM) (c) 2007 Elsevier Eng. Info. Inc. All rights reserved. 800974 EnCompassLit Document No.: 200606003 Oxidation of benzaldehyde to benzoic acid Author: Yan H.; Liu C.; Luo G. Corporate Source: Department of Chemistry, Liaoning University of Petroleum and Chemical Technology

Source: Petroleum Science and Technology 23/11-12 1511-1516 (ISSN 1091--6466)

(November 2005) Language: English ISSN: 1091--6466 CODEN: PSTEF

Journal Name: Petroleum Science and Technology

Document Type: JOURNAL ARTICLE DOI: 10.1081/LFT-200041057 Publication Date: 051100

Oxidation of benzaldehyde to benzoic acid

Abstract:

Benzaldehyde was oxidized to benzoic acid using Na(sub)2WO(sub)4.2H(sub)2O as a catalyst... ... The yield of cation surfactant was higher than that of anion ones ...

Assigned Terms: ...ATE; BENZALDEHYDE-A; *BENZOIC ACID-*P; *CATALYST; CATION; CONCENTRATION; HYDROGEN PEROXIDE-A; NONIONIC; *OXIDATION REACTION; OXYGEN; POLYSACCHARIDÉ; REACTION TIME; SODÍUM; SURFACE ACTIVE AGENT; TUNGSTEN; WATER; YIELD Index Terms: ...RING-A*P; *BENZOIC ACID-*P; *C7-A*P; CARBOHYDRATE; *CATALYST; CATION; COMPOSITION; CONCENTRATION; GROUP IA; GROUP VIA-NA... ...ION; *MONOCARBOXYLIC ACID-*P; NONIONIC; OPERATING CONDITION; * OXIDATION REACTION; OXYGEN-NA; PHYSICAL PROPERTY; POLYSACCHARIDE; REACTION TIME; *SINGLE STRUCTURE TYPE-A*P; SODIUM; SURFACE ACTIVE AGENT; TRANSITION METAL; TUNGSTEN; WATER; YIELD

34/3,K/37 (Item 2 from file: 354) Links Fulltext available through: ScienceDirect Ei EnCompassLit(TM) (c) 2007 Elsevier Eng. Info. Inc. All rights reserved. 0508816 EnCompassLit Document No.: 40F0590 Scleroglucan gels for profile modification in high-temperature reservoirs Page 154

Author: Fielde I; Stavland A Corporate Source: Rogaland Research Institute Source: SPE 1993 International Oilfield Chemistry Symposium (New Orleans 3/2-5/93) Proceedings 695-707 (1993) Language: English Document Type: MEETING PAPER Publication Date: 930302 ...Cr(sub)20(sub)7(sup)2(sup)-, it was found that dichromate has to oxidize alcohol groups on the scleroglucan molecule to carboxyl groups before Cr(sup)3(sup)+ Assigned Terms: AIME; ATE; CATION; CHROMIUM; COMPOUNDS; CROSSLINKED POLYMER; CROSSLINKING; *CROSSLINKING AGENT; GEL; GELATION; HIGH TEMPERATURE; MEETING PAPER; MELAMINE RESIN; *MOBILITY CONTROL; OIL RESERVOIR; OXIDATION REACTION; OXYGEN; *SCLEROGLUCAN; THERMAL STABILITY; *THICKENER INDEX TERMS: *ADDITIVE; AIME; ASSOCIATION; ATE; CATION; CHROMIUM; COLLOID/DISPERSION; COMPOUNDS; CROSSLINKED POLYMER; CROSSLINKING; *CROSSLINKING AGENT; GEL; GELATION; GROUP VIA; GROUP VIB.....RESIN; *MOBILITY CONTROL; OIL RESERVOIR; OPERATING CONDITION; OXIDATION REACTION; OXYGEN; PHASE CHANGE; PHYSICAL PROPERTY; POLYMER STRUCTURE; *POLYSACCHARIDE; *SCLEROGLUCAN; SOLIDIFICATION; STABILITY; SYNTHETIC RESIN... 34/3,K/38 (Item 3 from file: 354) Links Fulltext available through: ScienceDirect Ei EnCompassLit(TM) (c) 2007 Elsevier Eng. Info. Inc. All rights reserved. 0506072 EnCompassLit Document No.: 4000852 Catalytic oxidation of benzene to catechol with hydrogen peroxide by Fe(III) complex of gallic acid bonded to immobilized (BETA)-cyclodextrin Author: Sakuraba H Corporate Source: Kanto Gakuin University Source: Nippon Kagaku Kaishi (ISSN 0369-4577) N.12 1463-69 (1992) Language: Japanese ISSN: 0369-4577 CODEN: NKAKB8 Journal Name: Nippon Kagaku Kaishi Document Type: JOURNAL ARTICLE Publication Date: 920000 Catalytic oxidation of benzene to catechol with hydrogen peroxide by Fe(III) complex of gallic acid bonded... Abstract: Catalytic oxidation of benzene to catechol with hydrogen peroxide by Fe(III) complex of gallic acid bonded... Assigned Terms: ...BENZENE-*A; BENZENE RING; BIOPOLYMER; C7; CARBOHYDRATE; *CATALYST CATALYST ACTIVITY; CATALYST SUPPORT; CATION; COMPLEX; COMPLEX FORMATION; CROSSLINKED POLYMER; CROSSLINKING AGENT; DETERIORATION; EFFICIENCY; ELEMENT; ESTERIFICATION; FLUORINE... ... NITROGEN; NONE; NONHYDROCARBON SOLVENT; ORGANIC SALT; OXIDATION REACTION; PH; *PHENOL-*P; PHYSICAL SEPARATION; POLYSACCHARIDE; POTASSIUM; *PYROCATECHOL-*P; *RESORCINOL-*P; TEMPERATURE 20...
Index Terms: ...BIOPOLYMER; C3; *C6-*A*P; C7; CARBOHYDRATE; CARBOXAMIDE; *CATALYST; CATALYST ACTIVITY; CATALYST SUPPORT; CATION; CHLORINE ORGANIC; COMPLEX; COMPLEX FORMATION; CROSSLINKED POLYMER; CROSSLINKING AGENT; DETERIORATION; EFFICIENCY; ELEMENT; EPOXY; ESTERIFICATION.....SOLVENT; OPERATING CONDITION; ORGANIC SALT; ORGANIC SOLVENT: OXIDATION REACTION; OXYGEN-A; PH; *PHENOL-*P; PHYSICAL PROPERTY; PHYSICAL SEPARATION: POLYMER STRUCTURE; POLYSACCHARIDE; POTASSIUM; *PYROCATECHOL-*P; *RESORCINOL-*P; SATURATED CHAIN

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Ei EnCompassLit(TM) (c) 2007 Elsevier Eng. Info. Inc. All rights reserved. 0394479 EnCompassLit Document No.: 35F0179 DOWNHOLE USE OF BIOPOLYMERS Author: SUTHERLAND I W; KIERULF C Corporate Source: UNIV. EDINB. Source: INST. PET. LOND., "MICROBIAL PROBL. OFFSHORE OIL IND." INT. CONF. (ABERDEEN 4/15-17/86) PROC. 93-103 (1987) Language: English Document Type: MEETING PAPER; REVIEW Publication Date: 860415 Index Terms: ...BIOCHEMICAL REACTION; BIODEGRADATION; *BIOPOLYMER; BIOSYNTHESIS; CATION; *CAUSTIC WATERFLOODING; CHROMIUM; COMMERCIAL; COMPATIBILITY; COMPOUNDS; CROSSLINKED POLYMER; CROSSLINKING; CROSSLINKING AGENT; DEPOLYMERIZATION; DETERIORATION; DRILLING FLUID; EFFICIENCY....IP; MEETING PAPER; MIXING; NATURAL RESIN: OXIDATION INHIBITOR; OXIDATION REACTION; OXYGEN; PERMEABILITY; PHYSICAL PROPERTY: PLUGGING AGENT; POLYMER STRUCTURE; *POLYMER WATERFLOODING; POLYSACCHARIDE; PSEUDOPLASTIC FLUID; *RECOVERY; REVIEW; SHEAR...

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? d s
Set
                 Description
        Items
                 S E16-E17
S1
          210
             9
                 S S1 AND TRACHOMATIS
S2
S3
                 RD (unique items)
54
        69635
                 S TRACHOMATIS
                 S (ELEMENTARY(W)BODIES AND RETICULATE(W)BODIES) OR (EBS OR RBS)
S5
        42349
        57190
                 S SEROVAR OR SEROVARS
56
          332
                 S S4 AND S5 AND S6
s7
                 S (ADMINIST? OR INTRA) AND S7
S8
             5
                 RD (unique items)
S S4 AND S6 AND S8
59
             4
S10
                     (unique items)
S11
                 RD
                 S S4 AND S6
S12
         4477
S13
                 S S12 AND S8
      1053533
                 S POLYSACCHARIDE OR SACCHARIDE OR CARBOHYDRATE
S14
      2930093
S15
                 S OXIDATION OR OXIDIZING OR OXIDIZ?
S16
        40899
                 S S14 AND S15
                 S CATION OR CATIONS OR BIVALENT(W)CATIONS OR DIVALENT(W)CATION OR
      1085866
S17
VALENT(W)CATIONS OR VALENT NEAR CATION OR MAGNESIUM(W)CATIONS OR CATION(W)MG
                 S S17 AND S16
S18
           474
S19
S20
                 S S18 AND CONJUGATE
           19
            12
                 RD (unique items)
S21
          272
                 S S16 AND MAGNESIUM
S22
          208
                 RD
                     (unique items)
                 S S21 AND CATIONS
S23
           17
S24
            16
                     (unique items)
                 S S16 AND (CALICIUM OR MAGNESIUM OR CATIONS OR BIVALENT(W)CATIONS)
S25
          466.
            0
                 S S25 AND OXID$
s26
S27
          466
                 S S25 AND (OXIDIZE OR OXIDATION OR OXIDIZ?)
                 S S27 AND POLYSACCHARIDE
S S27 AND PNEUMONIAE
S28
          110
S29
           14
            10
s30
                 RD (unique items)
          110
S31
                 s s28
s32
           71
                 RD (unique items)
                 S S18 AND AGENT
            48
S33
S34
            39
                 RD
                     (unique items)
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? Please enter a command or be logged off in 5 minutes
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Estimated Cost Summary

Project Client Charge Code Searcher Job Service Code User Number

Nina Archie

51 294084 Date Time SessionID Subsession Subaccount 10/10/2007 21:03:27 133 3

Data Base Dial Units Access Charge Print Credit Types Prints Report Rank Links CSS Total 1.0850 6.51 0.00 34.50 0.00 0.00 0.00 0.00 0.00 41.01 0.2550 1.86 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.86 24

0.2610 1.62 0.00 0.00 0.00

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0.00
1.62
34
1.0750
26.74
0.00
173.52
0.00
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0.00
0.00
200.26
40
0.1620
1.16
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0.00
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41
0.1160
0.72
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0.00
0.00
0.00
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45
0.2680
1.34
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50
0.4330
1.99
0.00
6.00
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0.00
0.00
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0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.66 71 0.3170 2.95 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.95 73 1.1210 13.34 0.00 36.30 0.00 0.00 0.00 0.00 0.00 49.64 98 0.1980 0.84 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.84 103 0.4370 2.75 0.00 8.60 0.00 0.00 0.00 0.00 0.00 11.35 136 0.1590 0.98 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.98

143 0.1360 0.41 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.41 144 0.7770 3.85 0.00 5.40 0.00 0.00 0.00 0.00 0.00 9.25 155 1.0090 3.43 1.76 0.00 0.00 0.00 0.00 0.00 5.19 156 0.4400 2.59 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 3.59 162 0.2150 0.97 0.00 0.00 0.00 0.00 0.00 0.00 0.97 172 0.1060 1.26 0.00 0.00 0.00 0.00 0.00

305 0.1490 1.87 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.87 369 0.0930 0.32 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.32 370 0.0960 0.34 0.00 0.00 0.00 0.00 0.00 0.00 $\begin{smallmatrix}0.00\\0.34\end{smallmatrix}$ 393 0.2610 0.73 0.00 2.22 0.00 0.00 0.00 0.00 0.00 2.95 399 1.3090 16.43 0.00 46.75 0.00 0.00 0.00 0.00 0.00 63.18 434 0.2710 0.00 7.23

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0.00 13.98 28 0.1260 0.78 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.78 35 0.2880 1.18 0.00 0.20 0.00 0.00 0.00 0.00 1.38 91 0.1390 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.60 110 0.1190 0.68 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.68 135 0.1980 1.07 0.00 2.00 0.00 0.00 0.00 0.00 0.00 3.07 164 0.0890

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